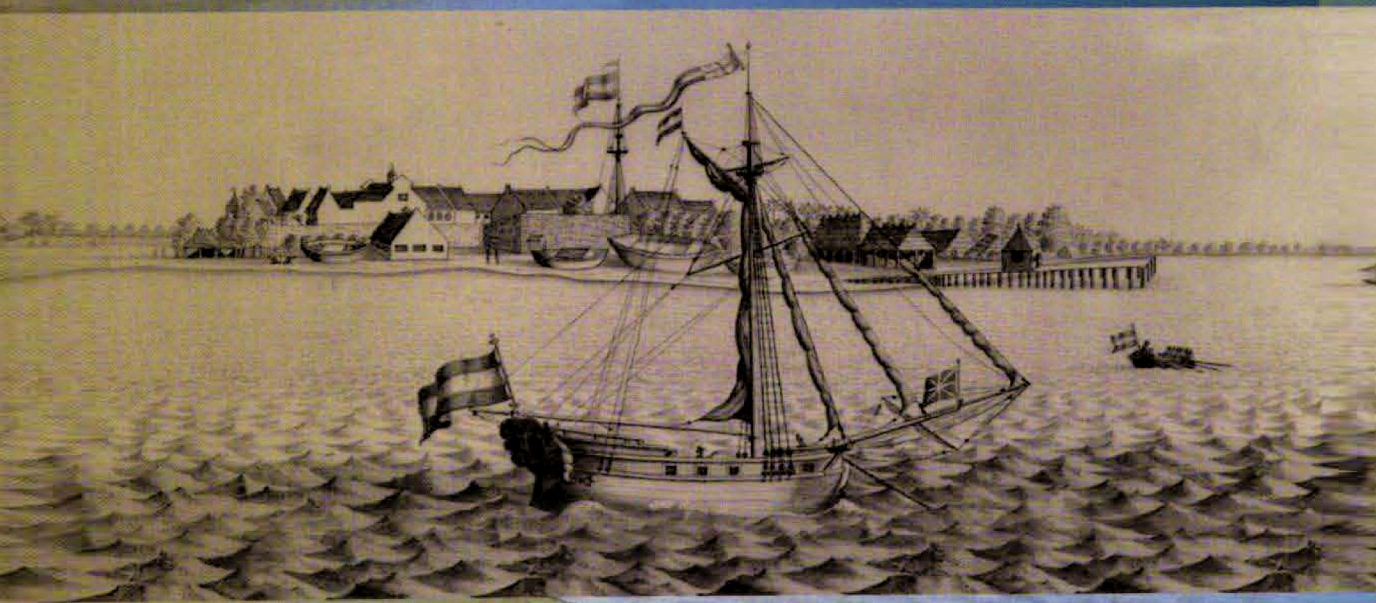
GERRIT KNAAP and
HEATHER SUTHERLAND

MONSOON TRADERS

SHIPS, SKIPPERS AND COMMODITIES IN EIGHTEENTH-CENTURY MAKASSAR



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MONSOON TRADERS

Cover: View on Fort Rotterdam and the village of Vlaardingen around 1750, drawing, anonymous (Rijksmuseum Amsterdam, Prints and drawings RP-T-00-3236)

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GERRIT KNAAP and HEATHER SUTHERLAND

MONSOON TRADERS

Ships, skippers and commodities in eighteenth-century Makassar

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Contents

List of tables, figures and maps viii

Preface xi

I Introduction 1
Makassar 3
Sources and methods 5
Outline of the study 9

II The VOC in Makassar: policy and trade 11
The historical setting 11
The town 16
Makassar's trade before and after the conquest 18
The harbourmaster and passes 22
The periphery: difficulties of control 25
The customs farm 30
The trade of the VOC 37
Summary 42

III Makassar's seaborne traffic 45
The ships 45
The weapons 52
The skippers 55
The crew 62
The owners 64
The volume of shipping 67
The direction of shipping 69
Shipping and the seasons 74
Duration and clustering of voyages 76
Summary 78

IV The flow of goods 81
General characteristics of cargoes 81
The pattern of imports and exports 86
Summary 120

V Case studies in trade: value, routes, ethnicities, skippers 123
The value of trade in the private sector 123
Private shipping, trade and routes: general characteristics 127
Private shipping, trade and ethnicity: general characteristics 133
Distribution of commodities according to route, Amoy excluded 137
The Amoy connection 145
Distribution of commodities according to ethnicity, Amoy excluded 149
Skippers of the early and late eighteenth century: some examples 156
Summary 165

VI Conclusion 167

Appendices
1 Weights and measures 175
2 Major statistical tables 181
A Total number of private sector ship movements 183
B Total number of VOC ship movements 183
C Total volume of incoming and outgoing private sector traffic in *last* 184
D Total volume of incoming and outgoing VOC traffic in *last* 185
E Number of private sector ship movements per ship type, percentage between brackets (rounded-off) 186
F Average number of crew and average volume in *last* of frequently occurring private sector ship types (rounded-off) 187
G Volume of traffic according to private sector ship type in *last*, percentage between brackets (rounded-off) 188
H Most common armament according to private sector ship type 1766-1769 190
I Most common armament of *paduwakang* 1766-1769, 1774-1777, 1786-1789 191
J Number of ship movements by private sector skippers according to group label, percentage between brackets (rounded-off) 192
K Volume of private sector shipping according to group label of skippers in *last*, percentage between brackets (rounded-off) 194
L Total number of crew on board all incoming and outgoing ships in the private sector and the VOC 196
M Number of private sector ship movements according to port 197
N Number of private sector ship movements according to geographical zone, percentage between brackets (rounded-off) 200
O Volume of private sector traffic according to port, in *last* 201
P Volume of private sector traffic according to geographical zone in *last*, percentage between brackets (rounded-off) 204
Q Minimum and maximum months of private sector activity, in percentage of the number of ship movements (rounded-off) 205

R	Total number of loads of merchandise in the private sector	206
S	Cargoes and loads on board private sector ships, percentage between brackets (rounded-off)	207
T	Imports and exports of the most important private sector commodities (rounded-off)	208
U	Estimated prices of the most important private sector commodities in rixdollars (rounded-off)	227
V	Annual average number of private sector cargoes and loads carried on selected routes (rounded-off)	236
W	Annual average number of private sector cargoes and loads carried by selected groups of skippers on the most important routes (rounded-off)	238
X	Annual average private sector imports into and exports from Makassar of selected commodities on the most important routes (rounded-off)	240
Y	Annual average imports and exports of selected commodities on the Amoy route and its percentage in the total private trade in Makassar in 1774-1777 and 1786-1789 (rounded-off)	246
Z	Annual average imports and exports of selected commodities transported by the most important groups of private sector skippers, Amoy excluded (rounded-off)	247

Bibliography 251

Index 261

List of tables, figures and maps

Tables

1 Annual average number of items and value, in guilders (rounded-off), of incoming cargoes on board VOC *spiegelschepen* from Batavia 37
2 Average number of crew and size of the most important private sector ship types (rounded-off) 45
3 Places of residence of skippers, as mentioned in private sector ship movements, in 1733-1734 57
4 Private sector ship movements and volume of shipping according to the principal ethnic and status labels, in percent (rounded-off) 59
5 Average annual number of crew sailing on private sector and VOC vessels 62
6 Ownership of private sector *chialoup*, *gonting* and *pencalang* in Makassar 65
7 Average annual number of ship movements and volume of shipping of the private sector and the VOC 68
8 Merchandise and loads on board private sector ships (rounded-off) 82
9 Average annual volume of private sector commodities according to standard of measurement, money excluded (rounded-off) 84
10 Annual average private sector imports and exports of money (rounded-off) 87
11 Annual average private sector imports and exports of paddy and rice, in *pikul* (rounded-off) 90
12 Annual average private sector imports and exports of coconut, coconut oil and palm sugar (rounded-off) 91
13 Annual average private sector imports and exports of arrack, candy sugar and fine-grain sugar (rounded-off) 92
14 Annual average private sector imports and exports of opium, Chinese tobacco and Javanese tobacco, in *pikul* (rounded-off) 95
15 Annual average private sector imports and exports of gambier, salt and tea, in *pikul* (rounded-off) 96
16 Annual average private sector imports and exports of agar-agar, trepang and karet, in *pikul* (rounded-off) 99
17 Annual average private sector imports and exports of birds' nests, rattan and wax (rounded-off) 103
18 Annual average private sector imports and exports of bowls, bowls and plates, and plates, in 100 pieces (rounded-off) 104
19 Annual average private sector imports and exports of Butonese chests and iron (rounded-off) 106

20 Annual average private sector imports and exports of bush-knives, knives and pans, in 100 pieces (rounded-off) 107
21 Annual average private sector imports and exports of raw cotton, gold thread and raw silk (rounded-off) 109
22 Annual average private sector imports and exports of Chinese cloth, Chinese linen and woven silk (rounded-off) 110
23 Annual average private sector imports and exports of Buginese, Selayar and other Sulawesian cloth, in 100 pieces (rounded-off) 112
24 Annual average private sector imports and exports of Indonesian non-Sulawesian cloth and Indian cloth, in 100 pieces (rounded-off) 114
25 Annual average private sector imports and exports of slaves (rounded-off) 117
26 Estimated annual average value of the principal private sector commodities, in rixdollars 125
27 Estimated annual average total value of private sector trade and average value per volume of shipping, in rixdollars 126
28 Estimated average annual value of selected commodities in the cargo of the Amoy junk, in rixdollars, percentage between brackets 148
29 Estimated annual average value of trade of selected groups of private sector skippers, in rixdollars, percentage between brackets 156

Figures

1 Annual average volume of traffic for Ambon, Amoy, Batavia, Sumbawa, in *last* 71
2 Annual average percentage of ships sailing without cargo in the 1720s and 1760s for Batavia, Semarang, Sumbawa, Bima, Ambon 128
3 Annual average percentage of the total number of loaded vessels on principal routes 130
4 Annual average percentage of the total number of loads on principal routes 131
5 Annual average percentage of the total number of loaded vessels for principal ethnicities 134
6 Annual average percentage of the total number of loads for principal ethnicities 135
7 Annual average estimated value of trade of principal ethnicities, Amoy excluded 151

Maps

1 Makassar in the Malay-Indonesian Archipelago 2
2 South Sulawesi 12
3 The town of Makassar, 1790 16

Preface

Many books are a long time in the making, and accumulate debts along the way. This monograph has had an unusually long gestation period, its birth delayed by adverse circumstances and the usual professional pressures, but never by a lack of committed assistance. David Brée's intellectual curiosity drew him into the project, and he and his programmers, Patrick Ploum and Tom Zuijdwegt, used their computer skills to accommodate our historians' need for flexibility and open-ended databases, despite the constraints of early 1980s technology. The meticulous data-entry, patience and good humour of Ankie de Jonge and Deborah Fernandez-Voortman released us from this fundamental but time-consuming task. Essentially, this study is the result of the digital manipulation of lists, made by Europeans assigned to eighteenth-century Asia, as part of their struggle to control trade. It is possible that the computer has enabled us to see patterns of which they themselves were only vaguely aware. Our indebtedness to those who gave us funds might be more material in nature, but no less heartfelt: without the financial support of the Vrije Universiteit Amsterdam, The School of Management of Erasmus University Rotterdam, the Koninklijk Instituut voor Taal-, Land- en Volkenkunde (KITLV), the Nederlandse Organisatie voor Wetenschappelijk Onderzoek and the Netherlands Institute for Advanced Study in the Humanities and the Social Sciences this project could never have been completed.

Even time and money can only produce results if the source material is available. The Algemeen Rijksarchief (ARA), now the Nationaal Archief, in The Hague, and the KITLV were our primary resources, and like scholars everywhere we are dependent on their depth of acquisitions and professionalism. In the near future, we hope to store our digitalized source material in the Nederlands Instituut voor Wetenschappelijke Informatie, of which the Nederlands Historisch Data Archief has become a part, to enable others to make use of it.

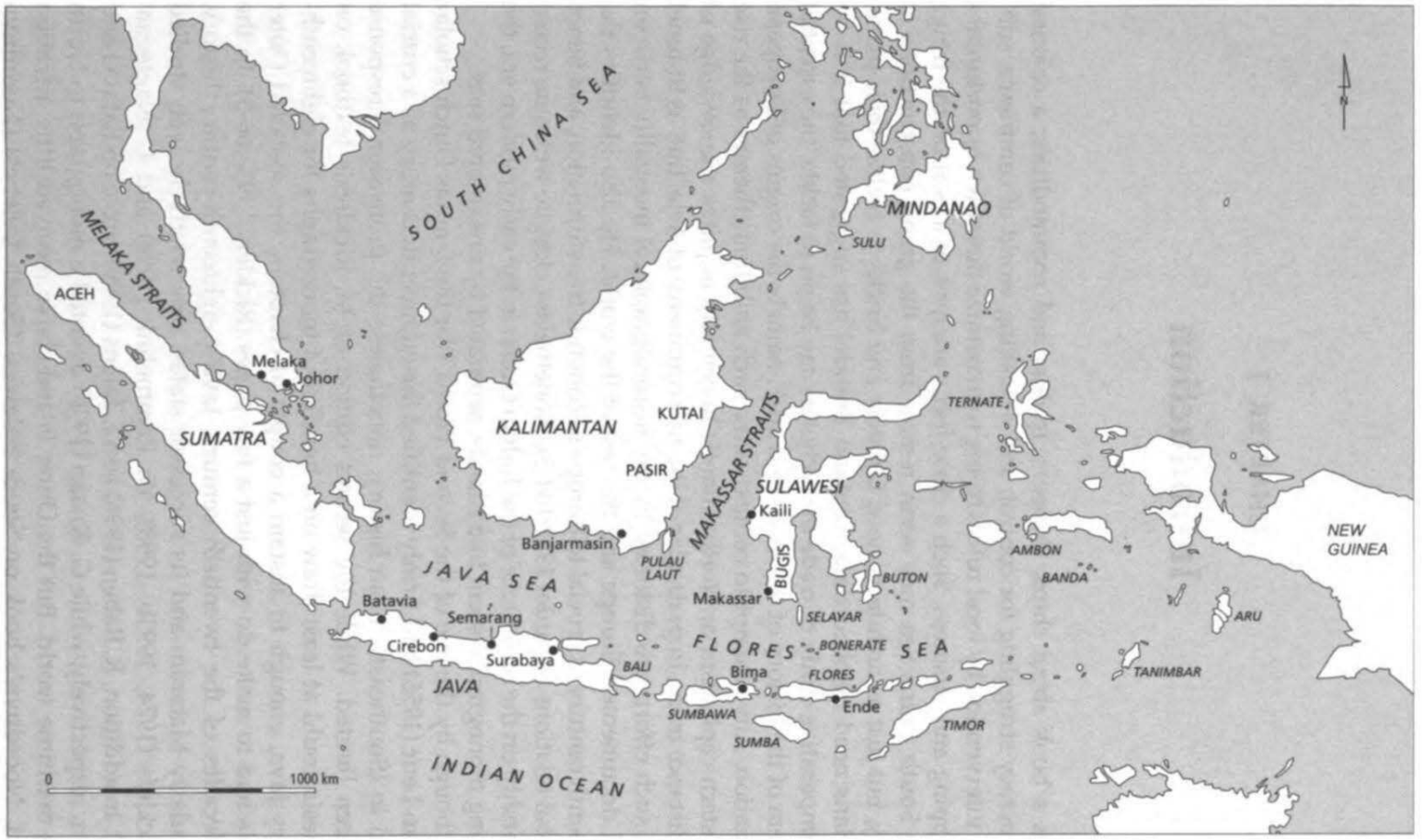
While correcting the proofs for this book, we learnt of the existence of a dissertation in German on Makassar by Jürgen Nagel, completed at the University of Trier in 2003. We were unable to take this into account.

CHAPTER I

Introduction

This is a book about ships, skippers, traders and commodities, a colonial bureaucracy struggling for control, and a bustling world of commerce, subject to intervention by local rulers trying to maximize their own opportunities in shipping and business. Such a close-focus analysis of a port on the fringe of the South China Sea may seem remote from the grand constructions of history, but just as architects need builders and bricks to realize their plans, historians need detailed data. Fernand Braudel has suggested that it is by the comparative study of trade that scholars can begin to tackle 'the essential problem of the history of the modern world', namely the origins of European domination. Any attempt to contextualize such ambitious themes as the rise of Western capitalism or North Atlantic hegemony requires a knowledge of long distance trade, in particular of the rich commerce of Asia. But, as Braudel notes, such efforts are distorted by the historiographical inequality between a well documented Europe and the rest of the world. He also identifies the eighteenth century as crucial to Europe's economic transformation, and hence to global relations (Braudel 1982:134-5). Nonetheless, despite welcome recent scholarship on the commerce of the Indian Ocean in the early modern era, the resulting monographs seem like islands, separated by unexplored seas.

Although by the eve of the Second World War the famous Dutch scholar J.C. van Leur (1955) had firmly identified the eighteenth century as a crucial period in (Southeast) Asian history, nonetheless the profession's response has been limited. While the second edition of M. Ricklefs's textbook on Indonesia could at least draw on a handful of monographs for eighteenth-century Java, enough to sustain a couple of chapters, the so-called Outer Islands had to make do with just a few pages (Ricklefs 1993a:66-8). In the last decades of the twentieth century, Java's eighteenth-century history, particularly Mataram and its successor states, was relatively well studied by Ricklefs (1974, 1993b, 1998), W. Remmelink (1994) and L. Nagtegaal (1996). In addition, R. Raben (1996) and J. Talens (1999) wrote on Batavia and Banten, respectively, while G. Knaap (1996) devoted a monograph to North Java's maritime world. But the Outer Islands have received little attention since J. Noorduyn's book on South Sulawesi (South Celebes) (Noorduyn



Map 1. Makassar in the Malay-Indonesian Archipelago

1955), the only substantial recent work being by R. Vos on the shores of the Melaka Straits (Vos 1993).

In this monograph we want to populate one corner of that empty landscape of eighteenth-century Indonesia's Outer Islands. Our analysis of structure and change in Makassar's maritime sector is based upon the registers kept by the local *syahbandar* (harbourmasters) of the Verenigde Oost-Indische Compagnie (VOC), or Dutch East Indies Company.

Makassar

A glance at the map of the Malay-Indonesian Archipelago immediately reveals the importance of the town of Makassar: it lies at the centre of that vast island-world. This pivotal position is enhanced by its very strategic location at an intersection of waterways, which provided the region's main means of communication until the mid-twentieth century. From Makassar it was easy to sail to the west and east across the Flores, Java and Banda Seas, thus linking the Malay Peninsula and Sumatra at one geographic extreme with New Guinea at the other. Sailors going north could use the Makassar Straits, leading to the Philippines and the South China Sea. Southern connections stretched to Nusa Tenggara (the Lesser Sunda Islands) and, beyond that, to the mangrove coasts and barren deserts of Australia. Until the eighteenth century, the benefits of these favourable strategic conditions were limited by the fact that the areas to Makassar's south and east were relatively underdeveloped, both demographically and economically. Consequently, in spite of its location, Makassar never played a central role in the Archipelago. Over the centuries, Sriwijaya, Melaka, Banten, Batavia and Singapore were the islands' hub ports. These trading towns were located where vessels from the Middle East and India met those of China, though Banten and Batavia were something of a special case, because they were not ideally located for this traffic.

The geographic promise that was Makassar only came to fruition in the sixteenth century, when the global economy began to exploit the riches of Maluku (the Moluccas), located to the east of Sulawesi, where spices, particularly cloves and nutmeg, were then grown exclusively. Located at the mouth of the Gowa River, Makassar emerged as the chief regional port because it was the outlet for the twin-principality of Gowa and Talo, neighbouring polities which combined rice-growing and seafaring skills to become the dominant power on the peninsula. As South Sulawesi itself did not contribute significant exports to the global economy its role was mainly that of an entrepôt for the international trading community. The inhabitants of Makassar themselves were able seafarers and freighters, so Makassar's

role in the Archipelago closely resembled that of Amsterdam in Northwest Europe.

Makassar and Amsterdam collided in the seventeenth century. In 1602 Amsterdam traders interested in commerce with Asia combined their capital with that of merchants from other Netherlands' ports to found the Dutch East Indies Company or VOC. By the middle of the century, the VOC had established a monopoly over the spice trade in Maluku, largely through the use of naval and military force. Makassar's access to Maluku, whether mercantile or political, was gradually denied, leading to increasing military conflict. The final showdown came in the years 1666 to 1669, when the VOC, with the help of other Sulawesians, notably from the rival Buginese principality of Bone, conquered and destroyed Makassar, occupying some of its territories, and re-establishing the town as a colonial settlement. The defeat of Makassar and the subsequent harsh reign of the new ruler of Bone, Arung Palakka, led many adventurous and disaffected Sulawesians to disperse through the Archipelago, creating a substantial diaspora. At first mere mercenaries for the VOC's opponents, they eventually emerged as an important political factor in the Malay-speaking areas around the Melaka Straits. Such settlements of diaspora Sulawesians became the backbone of trading networks which remained outside Dutch control. When Anthony Reid discussed the rather sorrow state of navigation and commerce of Southeast Asians during the eighteenth century, he mentioned one exception, namely Sulawesi's Wajorese and Buginese (Reid 1992b:501-2).

For the VOC their newly founded Makassar was essentially just a garrison town, the lock on the door safeguarding the spice monopoly in Maluku, and without any economic significance for the Directors in the Netherlands. Like so many other Dutch settlements in Asia, Makassar was a financial loss. Nevertheless, a new community of traders, fishermen and sailors grew up around the garrison, seeking to make a living from local waters, and by connecting Dutch dominated areas in Maluku with those in Java, particularly the VOC capital of Batavia. Company control over the navigation of these people and of similar neighbouring groups was regarded as essential in order to protect vested Dutch interests in trading monopolies, such as those in spices and specific Indian textiles. This control consisted of prohibitions, inspections and the channelling of routes. The issuing of passes for specific voyages was an important part of this system. The activities, structure and dynamics of this apparently rather marginal maritime community, caught between the need to earn a living from the sea and the straitjacket designed for them by the colonial authorities, constitute the core of this study.

Despite the lack of research, it is generally believed that eighteenth-century Makassar's situation, like that of other contemporaneous Indonesian port-towns, was less prosperous and enterprising than it had been before

VOC rule. Anthony Reid has argued that there was a flourishing 'Age of Commerce' in Southeast Asia which ended in the third quarter of the seventeenth century, with aggressive Dutch policies contributing to its demise. Reid wrote that the earlier outward-looking port-dominated principalities had no successors, and that 'subsequent regimes were less involved with international exchange, less cosmopolitan, and therefore less in touch with "modern" developments'. Furthermore, he suggests that from about 1690 there was a 'relatively deep wedge between Chinese and Europeans on the one hand and Southeast Asians on the other', weakening integration and promoting dualism (Reid 1992b:492-6). From this perspective VOC Makassar could be expected to be rather depressed in the 1700s, with indigenous Southeast Asians in particular losing ground, after their 'Golden Age of Commerce'. We trust that the material presented here will help clarify the extent to which the maritime sector of eighteenth-century Makassar did in fact enter darkness after light.

Such general questions will not, however, be addressed directly in this monograph, which presents a detailed, highly focused and deliberately narrow analysis of Makassar's registered trade. We have taken the shipping lists and analysed them within their own parameters, giving only the context necessary to understand the data. This self-limitation was essential in order to keep the lines of analysis as uncluttered and transparent as possible. Nonetheless, and despite the limitations on the material discussed below, we believe that the lists provide unique series of data over many years, offering insights into trends and structures in the elusive world of eighteenth-century East Indonesian private trade. As such, they can generate very specific localized material, which can take us another small step towards redressing the historiographical imbalance noted by Braudel.

Sources and methods

The main, indeed, essential source for this study is the register of Makassar's non-VOC shipping and trade maintained by the Dutch harbourmasters since 1713. The VOC had kept a wary eye on this 'private' maritime traffic before then, but, at first, probably only noted it in the 'Daghregister', the day-to-day journal kept at the local headquarters in Fort Rotterdam. During the seventeenth century this was routine in other VOC establishments, such as Ambon (Knaap 1987a:219). From 1695 onwards or, perhaps earlier, the harbourmaster seems to have kept lists of special categories of traffic, such as that from Ambon and Banda (VOC 1568:258-9). In so far as we know now, the Makassar VOC harbourmasters' registers have only survived in the archives for the years 1717-1734 and 1766-1797. Additional information from the

VOC and other archives and from published sources has been added where appropriate.

The harbourmasters' registers were usually drawn up per month; incoming and outgoing traffic was noted down in separate lists. For each ship movement, entering or leaving the port, the following information was available in these lists:

- the date of arrival or departure;
- the port of departure or destination;
- the ethnic label or legal status of the skipper;
- the name of the skipper;
- the type of vessel;
- the volume of the vessel measured in Dutch ships' *last* (equal to two tons);
- the number of crew-members on board;
- the specification of the different commodities on board, including quantities carried.

In the beginning of the century, in the period up to 1734, there was also a more or less systematic entering of data concerning ships' owners. Information about skippers' places of residence was also available in the beginning, albeit limited to the 1730s. Unfortunately, ownership and residence were rarely found in the sources after 1766. On the other hand, from 1766 onwards weaponry on board was increasingly, and rather systematically, noted. Occasionally, there was also information on ships' passes, passengers and the composition of the crew.

These registers, being structured lists, are extremely well suited for a quantitative analysis with the help of computer technology. This Makassar project was conceived in the early 1980s, when computer or PC-technology, disk-space and software were limited in ways which now seem inconceivable. The project was fortunate in obtaining the help of several computer enthusiasts, led by David Brée, in overcoming these constraints through an ongoing process of adaptation. The first software used was Infostar, which was replaced by dBase II and then dBase III (Sutherland and Brée 1987:380-4). By the end of the 1980s, we had settled on dBase III+, which was sufficient for our purposes. Attention then shifted to standardizing and analysing the data. Given the time-consuming character of data entry, it was impossible to cover all available years. It was decided to limit data-entry to the first and the last year of the period 1717-1734, namely 1717-1718 and 1733-1734, and the first and the last year of the period 1766-1797, namely 1766-1767 and 1796-1797. Moreover, we felt that the analytic potential would be enhanced if blocks of subsequent years were studied. To that end, the four-year block 1722-1726 was entered, while the years 1767-1768 and 1768-1769 were added

to 1766-1767 to form a three-year block, namely 1766-1769. Finally, to give more body to the analysis the blocks 1774-1777 and 1786-1789 were entered. The block 1774-1777 was chosen to enable us to examine the connection between Makassar and East and Central Java, as those years for Java had, in the meantime, become the subject of a comparable study using the same methodology (Knaap 1996).

For an efficient use of disk-space, and to overcome limits on the length of data-fields and records – we are still speaking about the 1980s – the information in the sources for each ship movement was divided over four different categories of records, namely 'ships', 'arms', 'cargoes' and 'remarks'. Each of these records in turn was sub-divided into specific fields. The ships record, for instance, contained all information about ships, skippers, crews and owners. The number of crew, size of ship, skippers' names, ethnic or status label, and so on, were thus entered in different fields. The arms records and the cargoes records contained, obviously, everything on weapons and commodities. The remarks record contained more incidental information, such as comments on the ethnic background of the crew, the function of the non-skipper owner or other persons on board. As a consequence, the remarks record was only occasionally used. When necessary, the different records for one single ship movement could be connected by the field movecode, which was present in all four categories. The movecode was always derived from the date of sailing, an 'I' or 'O' for incoming or outgoing, respectively, and an 'A', 'B', 'C', and so on, to identify individual ships on those days, when more than one vessel sailed in or out. After everything had been entered into the databases, standardization programmes were used to check the spelling of certain fields, for instance the names of places, ship types, products, arms and measures (Sutherland and Brée 1987:384-7).

The next step was to make calculations on the basis of the standardized material, using database-analysing programs such as Reflex, to begin the process of interpretation. The database was designed to allow regular modification, as we knew that in the course of the research new questions would arise, necessitating new combinations of data. Sometimes fields had to be added to make further manipulation possible. In particular the flow of goods, the sum of the cargo-records, needed many extra labels to facilitate refined analysis. Here we hoped to be able to reach an ultimate calculation, in which all different units of weights and measures for one single product could be reduced to a single common denominator. For instance, if product X was given in baskets, packs and *pikul* (125 pounds), everything had to be brought back to one unit, for instance *pikul*. Unfortunately, one basket of product X might have a totally different weight from one basket of product Y. Consequently, it was not possible to unify weights and measures using universal formulas applicable to all products. Each commodity, or, at best,

each class of commodities, had to be treated separately. Careful procedures were necessary. It goes without saying that in many cases exact information on the true proportional relationship between different units of measurement was unavailable. Often educated guesses had to be made through reasoning by analogy.

Although the outcome of the calculations looks impressive, we cannot ignore the limitations of the sources, as the data only cover part of Makassar's shipping and trade. Firstly, the VOC's own maritime activity was not entered in these registers. However, we compensate for this by using other data from the VOC archives. Secondly, private navigation that remained within the VOC province of Makassar was also unlisted. This could be considered to be 'internal', 'local' or 'domestic' traffic. Unfortunately, the definition of this category is not completely clear. Thirdly, the difference between fishing and trading activities is also uncertain. Finally, of course, it goes without saying that 'smuggling' by skippers and crews, or even by Company personnel themselves, was totally invisible in official sources (Sutherland and Brée 1987:378-9).

Apart from these categories deliberately excluded from the registration, there is also no doubt that both the efficiency and the probity of harbour-masters could be open to doubt. In the study of private shipping and trade in fourteen ports in Java referred to above, it was estimated that 'under-registration' of shipping was by about 30%, while that of trade was even higher (Knaap 1996:182-6). On the basis of the information in the Makassar harbour-masters' registers it is not really possible to estimate 'under-registration'. However, if one looks at the discrepancy or disequilibrium between incoming and outgoing private traffic, it appears that the situation in Makassar was not as unfavourable as in Java. Whereas registered incoming traffic in Java only reached 61% of outgoing, in Makassar it was 83%. Therefore, the estimate for under-registration of Makassar's traffic must be below 30%, probably around or just above 20%. A reason for this better performance might be that in Makassar, for sheer geographic reasons, inter-insular traffic was relatively more important than local coastal traffic, when compared to a medium-sized port in Java. This inter-insular traffic, stretched over longer distances, was less able to escape the authorities than was short-haul traffic. From the point of view of income, dues for registration and taxation, inter-insular traffic was also more interesting to the authorities than vessels sailing short routes. Consequently, the longer the distance the better the administration. Nevertheless, a warning to the reader remains appropriate. The mass of quantification should not convey a false sense of accuracy. The outcome of the calculations does not present an exact picture of what was going on, but is only an indication of facts, structures and processes. The data from the registers may bring us so close to the local skippers of South Sulawesi that we

know their names, can list their cargoes, and describe their ships, so that we can begin to appreciate the diversity of a previously undifferentiated world, but we can still only see a part of a complex whole.

Outline of the study

Besides the introduction, this book consists of four basic chapters, a conclusion, an appendix on weights and measures and an appended set of 26 large tables, showing the most important quantitative results of the manipulation of data from the sources. These large tables provide the backbone for the analysis in the basic chapters, and each table is accompanied by a commentary describing how it was compiled and what its limitations were. Since the line of argument is often complex, small tables and figures summarizing aspects of the 26 main tables are included in the chapters. After the chapters a conclusion then reviews our findings, and places them in the context of the literature.

Chapter II, 'The VOC in Makassar: policy and trade', opens with a short overview of political developments in South Sulawesi during the seventeenth and eighteenth centuries, sketching the political rivalry between the major regional principalities and also Dutch involvement. This is followed by an outline of the structure and development of the VOC-controlled town of Makassar, of its pre-conquest shipping and trade networks, and of attempts to rebuild these networks, at least in part, after the Dutch take-over. Special attention is given to the VOC's harbourmasters and the official regulation of private shipping. It appeared that this was problematic, and that control, in particular in Makassar's far periphery, was mostly theoretical. By the mid-eighteenth century the taxation of trade was no longer in the hands of the VOC's own harbourmaster, but had been delegated to tax farmers. The development of this customs tax farm and the competition between different interest groups over its control are also discussed. The chapter closes with the treatment of the Company's own trade in Makassar, which centred around the sale of Indian textiles. The High Government in far away Batavia, and the Directors or Gentlemen Seventeen in the even more distant Dutch Republic, were always disappointed by the poor profits realized from these sales.

Chapter III, 'Makassar's seaborne traffic', deals with shipping. It starts by describing the most important types of vessel, both of Sulawesian and non-Sulawesian origin, including those of the VOC. The evolution of the shipbuilding tradition of Sulawesi itself is also considered. This is followed by a thorough analysis of the sources' information on shipboard weapons. Having considered the hardware, we then turn to the people active in the maritime sector. We begin with the commanders on board, namely the skip-

pers: their numbers over the years, their places of residence and the ethnic and/or status labels assigned to them. Then the crews are discussed: their numbers, ethnic backgrounds and the scant information we have about on-board relationships. After the crew come the owners, both those who sailed their own vessel, and those who simply stayed on shore. The last part of this chapter examines the volume and direction of both private and VOC shipping over the course of the century. Finally, we survey the rhythm of shipping, particularly the seasonal nature of traffic, and the duration and clustering of voyages.

Chapter IV, 'The flow of goods', deals with trade, as the title indicates. Here we set out the data on cargoes as categorized in the sources, by product, in amounts, weights and measures, which were subsequently standardized in so far as was possible. The first section of this chapter is devoted to the general characteristics of cargoes. At times, many vessels were recorded as sailing without merchandise, and a disequilibrium between overall levels of imports and exports was also apparent. These broad characteristics tended to shift over time. Section two considers the most important commodities handled in Makassar: money, cereal foods, products derived from coconut palms and sugar cane, addictive drugs in a broad sense of the word, salt and other sea produce, forest-derived goods, Chinese earthenware, iron and various tools and utensils, semi-manufactured textiles, Sulawesian, other Indonesian and Indian cloth, and finally slaves. In this section we also discuss the origin or destination of certain commodities and the volume traded during the course of the century, as well as the ethnic and/or status labels of the skippers involved.

Chapter V, 'Case studies in trade: value, routes, ethnicities, skippers', gives a more in-depth analysis of the flow of goods. It opens with a section in which a tentative attempt is made to establish the value of trade, first of a few categories, and then for the whole of Makassar. Then, in the second section, we compare the general development of trade and shipping on the main routes to and from Makassar, for instance with Batavia, Semarang, Sumbawa, Ambon, etcetera. Then follows a comparison of the performance of the main categories of skippers: Burghers, Chinese, Malays and the most important groups of Sulawesians. We also consider the distribution of major trade items over the most important routes and main groups of skippers. In this section, a separate paragraph is devoted to the connection with Amoy, now Xiamen, in China, which was a very special case. Comparisons on the basis of estimated value are important in these paragraphs. To some extent, this is also the case in the last section of the chapter, where selected individual skippers are followed on their journeys in order to give the reader an impression of the frequency and scale of Makassar's eighteenth-century shipping and trade.

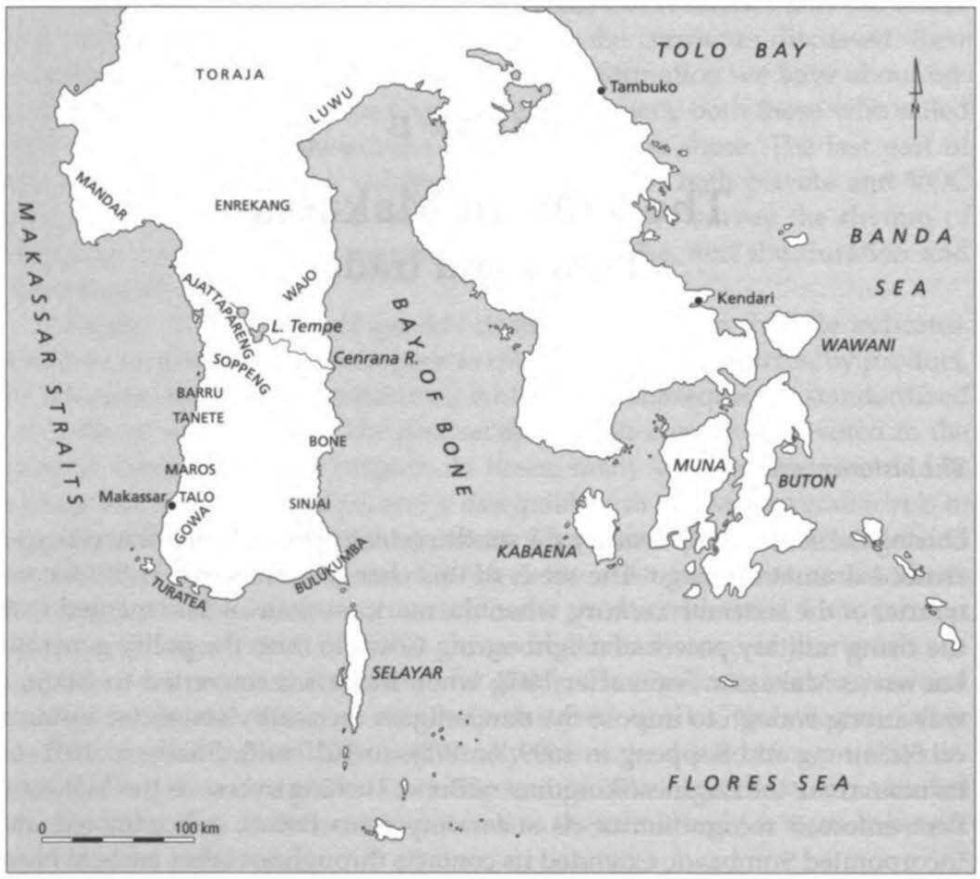
CHAPTER II

The VOC in Makassar
Policy and trade

The historical setting

During the seventeenth century the southwestern peninsula of Sulawesi experienced dramatic change. The seeds of this change were sown in the second quarter of the sixteenth century, when the maritime state of Talo merged with the rising military power of neighbouring Gowa to form the polity generally known as Makassar. Soon after 1607, when Makassar converted to Islam, it was strong enough to impose the new religion on nearby states, for instance on Sidenreng and Soppeng in 1609, on Wajo in 1610 and, finally, in 1611, on its main rival, the Buginese kingdom of Bone. Turning overseas, the Makassar fleet enforced recognition of its suzerainty from Buton, subordinated and incorporated Sumbawa, extended its contacts throughout other parts of Nusa Tenggara, and established close ties with Islamic states along Kalimantan's east coast. Islam provided a new framework for political alliances and hostilities, increasing friendship with other Islamic states and reinforcing suspicion of Christian expansion (Andaya 1981:24, 32-5; Reid 1983:135).

Makassar developed into a major rival of the more easterly sultanate of Ternate, the main overlord of Maluku. It was Makassar's proximity to these fabled spice islands that increasingly entangled the port in alien rivalries, as Portuguese, Spanish and Dutch competed for control of Maluku during the sixteenth and seventeenth centuries. The Portuguese had arrived in the Indian Ocean in 1498, but it was their conquest of the great Straits emporium of Melaka in 1511 which sent shock waves throughout the region, and Malay refugee traders to Makassar. The Portuguese Estado da India, the 'State of India', based in Goa, sought its revenue through the sale of sea-passes and by selling the right to sail intra-Asian trading routes to Portuguese Asian settlements. In Makassar, as elsewhere, the local Portuguese community grew rapidly, its merchants forming close links with local traders and ruling families, to their mutual benefit. The Dutch, English and Danes maintained



Map 2. South Sulawesi

trading posts in Makassar, and a few Spanish traders visited regularly from their Philippine capital of Manila. For much of the seventeenth century the English East India Company's factory in Makassar regularly sent spices from Maluku to their headquarters in Banten, infuriating the Verenigde Oost-Indische Compagnie (VOC, or Dutch East Indies Company) (Bassett 1958:9; Souza 1986:12; Villiers 1990:155).

The spice-rich archipelago of Maluku was of vital interest to the VOC. In 1605 it had taken over all Portuguese strongholds in the area. Through vigorous naval and military campaigns the Dutch further established a monopoly over the spice trade during the first half of the seventeenth century, directly occupying certain areas of Maluku and using their ally Ternate to exercise indirect control in the rest. Makassar's influence, and its free trade rhetoric, undermined this control, and threatened the very basis of Dutch profits.

Makassar had to be forced into acceptance of the VOC's commercial hegemony, and so it was, after several wars, eventually crushed by a Dutch-Bugis alliance led by Admiral Cornelis Speelman in the years 1666-1669 (Andaya 1981:73-99, 117-36).

For several years Speelman had been collecting information about the South Sulawesi peninsula, and, back in the VOC capital, Batavia, he submitted his voluminous 'Notitie' in February 1670 to the High Government, as the Company's supreme authority in Asia was called. The 'Notitie' is an encyclopaedia of the region, recording details of politics and trade, and provided a basic point of reference for future administrations and scholars alike (VOC 1276:684-1007). Not that the Netherlanders wished to become too closely involved in South Sulawesi; they left the internal affairs of the indigenous states alone, unless basic security or commercial interests were threatened. The VOC was only interested in using Makassar to stop the spice leaks from Maluku, so all that was needed was a garrison base, good contracts, and reliable allies. These principles were worked out for the first time in the Treaty of Bungaya of 18 November 1667 (Stapel 1922:237-47). This treaty, named after a settlement south of Makassar and concluded after the defeat of Makassar in the first round of the war, established – as far as the Dutch were concerned – the rules of the game in South Sulawesi for the next two to two-and-a-half centuries.

The Dutch can hardly be blamed for keeping their distance from the complex tangles of South Sulawesi politics. The wars endemic to the region continued. Politics in South Sulawesi were characterized by flexible opportunism and intense competition between patronage networks, chiefdoms, individual principalities and the many federations. Intermarriage between local nobilities created multiple allegiances and claims to legitimacy, encouraging the involvement of various states in succession disputes and conflicts. The creation of Makassar itself, with Talo for all practical purposes disappearing into Gowa, is an example of this process. While the dominant political fact in early modern South Sulawesi remained the rivalry between Makassar, on the southwest coast, and Buginese Bone, on the east of the peninsula, smaller states could exploit the fluidity of the system to create their own niches. Speelman's campaigns shattered the political constellation in South Sulawesi, destroying the dominant power of Gowa. This opened the way for re-alignments in local power relations, including ultimately a re-emergence of Bone, led by Speelman's ally, the Buginese prince Arung Palakka.

Arung Palakka's alliance with the VOC provided the springboard for a centuries-long domination of South Sulawesian politics by Bone. First, he embarked on a series of campaigns with the dual aim of punishing the defeated states, and enforcing recognition of his personal power. He conquered the Bugis trading polity of Wajo in 1670, cutting off its access to

the sea and, in alliance with the Dutch, subdued – albeit temporarily – the seafaring Mandar states to the north the year after (Andaya 1981:138-45). He finally succeeded to the throne of Bone in 1672, and proceeded to establish an authoritarian rule quite at variance with tradition, and which did not long survive his death in 1696. During and after the campaigns of the VOC and Arung Palakka many discontented Makassarese and Buginese fled the peninsula to start new careers in colonies elsewhere in the Archipelago (Andaya 1981:148, 296-302, 1995:120).

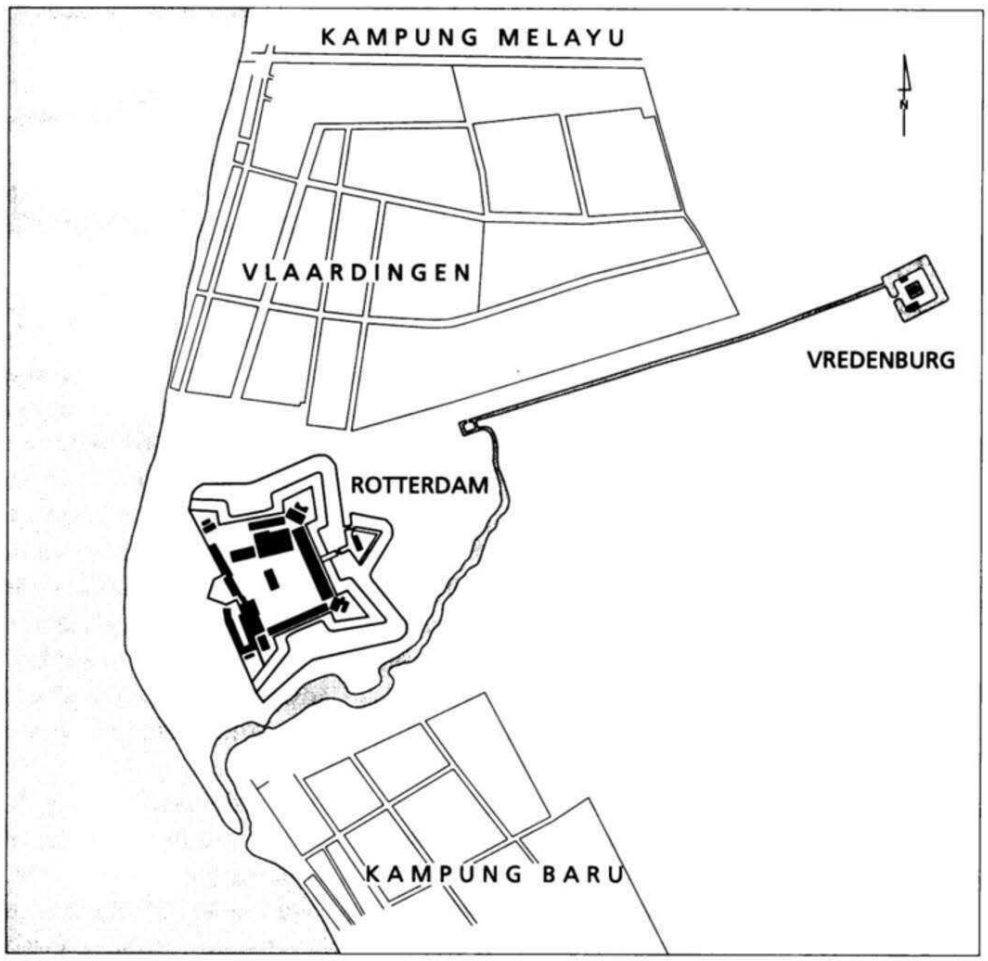
The old Makassarese heartlands covering the southern tip of the peninsula were now the spoils of war. The fertile plains around Maros, once about seventeen chiefdoms under the suzerainty of Gowa, officially became VOC territory known as the 'Northern Districts'. The devastated areas were parcelled out among loyal chiefs, and repopulated with migrants or enslaved remnants of the original inhabitants. The 'Southern Districts' were Galesong and Polombankeng. Besides that, the VOC ruled Selayar, Bantaeng and, temporarily, Bulukumba (H 817:279-81). The provinces, or 'districts', soon regained their crucial role providing Makassar's most important local commodity: rice. Despite theoretical Dutch control, these areas remained an important factor within the arena of Sulawesian politics with Bone and the local chiefs holding real power. Even the VOC's collection of the tithe on the rice crop, their only real prerogative, was subject to Bone's cooperation, and often interrupted by revolts. Effective Dutch rule in the region was only established after 1824 (Sutherland 1983a:169-72).

While Bone was dominant, it was far from unchallenged. The Gowan court sought redress and revenge in a series of intrigues and rebellions, involving nobles from various principalities, such as Soppeng, Mandar, Bantaeng, Wajo and Bone itself. Given the complex webs of family ties linking the various ruling houses, there was no shortage of succession disputes or wounded pride to fuel contention. Minor conflicts were endemic, but the most dramatic challenge came from Wajo. Arung Singkang, an ambitious Wajorese nobleman and piratical raider, began his career in East Kalimantan, conquering Pasir and Kutei in 1726, two trading centres with predominantly Bugis populations. He returned to South Sulawesi in 1735, after failing to take Banjarmasin. His mission was to break the grip of Bone, and by 1739 he had enough opportunistic allies to attack the Dutch stronghold of Makassar itself and to burn the neighbouring Bone court. The VOC, which had successfully held him at bay, responded with a damaging but inconclusive expedition against Wajo. War spread throughout the region, enveloping Wajo itself in the 1740s. Gradually, Arung Singkang lost support. Retiring from Wajo in 1754, he continued to harass Bone until his death in 1765 (Noorduyn 1955:127-41, 1972:61). But although Arung Singkang had failed in his plans to break the Dutch-Bugis alliance, he nonetheless had succeeded in effectively removing

Wajo from Dutch control for about a hundred and fifty years, a fact which had profound implications for the trading patterns of the eastern Archipelago.

The dust had barely settled when the next major crisis erupted. The ruler of Gowa, Batara Gowa Amas Madina, had succeeded his father when he was six years old in 1755. When he was sixteen, in 1765, Batara Gowa was officially enthroned. However, he suddenly left the court the following year and went to Bima to join his mother, a princess of the Bima sultanate. The Dutch Resident there reported his arrival, and the Dutch, ever suspicious of English interlopers, feared that Anglo-Makassarese plots were in the making. In 1767 the young prince was arrested and shortly afterwards exiled for life to Ceylon. Campaigns to obtain his freedom, by family and allies opposed to his Dutch-appointed successor, were to no avail. But disaffection within the nobility intensified, and found an outlet with the appearance of Sangkilang, an ex-slave, claimant to the throne, known to the Dutch as the 'false Batara Gowa' (Roessingh 1985:155-8). Sangkilang's rebellion lasted from 1776 to 1785, and devastated large areas of South Sulawesi. He was accepted by the Makassarese as the returned Batara Gowa, and elected ruler of Gowa in 1777. Faced with a formidable threat, the local VOC government in Makassar town requested reinforcements from Batavia, and a year after Sangkilang's installation, the core area of Gowa was captured. Sangkilang retreated to the mountains, where he was a potent symbol for anti-Dutch noble factions, which increased in strength after the Dutch imposed a humiliating treaty on the new Gowa ruler in 1781 (Roessingh 1985:158-65).

The death of Sangkilang in 1785 did not offer much respite to the Dutch, as the 'Makassarese of the Mountains' were then led by a more conventional ruler, the king of Bone. The aristocratic genealogies of South Sulawesi were so intertwined that the Bone king regarded himself as the legitimate heir to Gowa, both by descent and because he held the sacred state regalia, passed to him when Sangkilang died. This expansion of Bone's claims was very worrying to the Dutch, as it was in many ways a logical extension of Bone's increasingly open challenge to the VOC's status in the peninsula. From Arung Palakka on, the division of power between the two victors in the Treaty of Bungaya had been problematic, based on mutual manipulation, negotiation and compromise. For the VOC, and even more for individual Dutchmen on the spot, Bone was to be treated with care. Consequently, the Bugis court was free to govern its own territories and play regional politics with little VOC intervention. However, by the 1780s, Bone had become reluctant to offer the most elementary face-saving compromises to the Dutch, so rejection of VOC authority was becoming ever more widespread and overt (Roessingh 1985:165-6).



Map 3. The town of Makassar, 1790 (after Algemeen Rijksarchief, VEL 1309-2)

The town

Prior to the Dutch conquest the fortified centre of Gowa enclosed palaces, royal warehouses, a mosque and residential compounds. Against the northern wall were the foreign merchants' quarters: two blocks of Portuguese and one of Gujerati. Markets, several *kampung* and a Chinese quarter completed the town (Sutherland 1989:100). *Kampung* were settlements inhabited by Malay-Indonesian ethnic groups. The pattern was recreated a few kilometers to the north, on a more modest scale, in Dutch Makassar. The pallisaded quarter of Vlaardingen was just north of Fort Rotterdam, which had replaced

Gowa's old northern fort of Ujung Pandang. The beach was to the west, while fields, the company garden and the Bone king's court lay to the east. South of the Fort a new village arose, the Kampung Baru, which housed a similar population to Vlaardingen, if perhaps less prosperous. Half an hours walk north of Fort Rotterdam was Kampung Bugis. Since VOC laws were little heeded there, the Dutch tended to see it as lawless, though Buginese nobles had houses and influence in this community. Kampung Melayu, lying to the north of Vlaardingen, was regarded as a necessary buffer between the Bugis and the VOC quarters. The Malay community, the largest in the early eighteenth century, was integrated into the life of the Dutch-led but multi-ethnic settlement. The first Malay administrative chief, the Captain of the Malays, was appointed in 1706. Other *kampung* which formed part of the agglomeration sheltered immigrants, traders and visitors from specific regions, such as Wajorese, Galesongers, Butonese, Endenese and Moluccans (Sutherland 1989:109-11, 115, 2001:405-7).

Each settlement had its own leadership, sometimes called 'captain' or 'lieutenant', responsible for 'law and order'. This included some administrative tasks as well as the obligation to be an arbiter in internal civil law cases. In addition, they were supposed to represent the community in the relations with the VOC or the Sulawesian courts. Such headmen could have a privileged position in the trade of their communities. This was, for example, the case for the chiefs of Kampung Wajo. In order to guarantee peaceful trade relations, in 1698 the leaders of some communities, notably those of the Chinese, Malays and Wajorese, agreed to jointly resolve disputes (Noorduyn 2000:100, 103, 115).

After the conquest the town of Makassar became one of the chain of bases maintained by the VOC at strategic places throughout the Archipelago. Dutch power was focused in Fort Rotterdam, where a small group of six or seven qualified merchant-administrators with the Governor, formed the highest VOC authority of Makassar, the 'Political Council'. The total VOC strength – military and civil – was usually 800 or 900 men. This was less than half of all the inhabitants of the heart of Dutch Makassar, which consisted of Speelman's new Fort and the settlements of Vlaardingen and Kampung Baru. Most of the residents living under Dutch protection were part-European Mestizo, Chinese, Malay or of various locally born mixtures, the so-called *peranakan*. If the *kampung* were included, VOC employees were less than 20% of the total 'urban' population of about 5,000 (Sutherland 1986:41-2, 48).

During the eighteenth century Makassar's settled population was classified in various ways. In the beginning, 'soul counts' were by ethnicity, and a division was made between Europeans and those of mixed descent, the Mestizo, with European fathers and Asian mothers. But the rapid growth of multi-ethnic domestic life blurred divisions. The Mestizo category was soon

abandoned in favour of a more official distinction between VOC employees and Burghers, meaning Europeans who were not in the service of the Company, usually locally born Mestizos or retired VOC personnel. Excluding the garrison in Fort Rotterdam, but counting women, children and slaves, the 1722 census noted the following categories: VOC employees 2,147, Burghers 899, Buginese and Makassarese 250, Chinese 917, Moors and Kodjas, that is persons of Indian descent, 371, Ambonese and Bandanese 75, Butonese 105 and Malays 881 (VOC 1979:96-7). The population of several of the *kampung* was not given. In 1771, 1781 and 1791 VOC employees and Burghers were lumped together to give 2,568, 2,780 and 2,706 souls respectively, as opposed to Malays, free Makassarese, Moors, Butonese and other inhabitants of the *kampung* with 3,806, 3,936 and 4,934 for the three years (VOC 3302:48; VOC 3580:54; VOC 3939:123).

The 1781 census makes explicit a fact that was taken for granted in earlier counts, namely that people were counted 'with their slaves'. Men were governors of their own households and slaves, like indigenous wives and Mestizo children, followed the ethnicity of the head of the household as far as the census was concerned. In the early eighteenth century at least, the slave inhabitants of Makassar outnumbered the free, with each European, including Mestizo, and Chinese adult male holding over five slaves on average. Apart from the nobility, who controlled large groups of slaves and bondsmen, the Southeast Asians tended to possess far fewer slaves. While many slaves would have worked in the houses, gardens, market stalls and workshops of their owners, some were undoubtedly commodities, kept in custody awaiting a ship to take them to the workshops of Batavia or other markets. A rough estimate for the second part of the eighteenth century claims that about 3,000 slaves a year were exported from Makassar (Sutherland 1983b:270). The prevalence of slavery, with the related concubinage, ensured that the patterns of domestic life in Makassar were very different from the idealized Calvinist norms of the Netherlands.

Makassar's trade before and after the conquest

Prior to the conquest by the combined forces of the VOC and its Buginese allies Makassar was known for its wide trading networks. Cornelis Speelman summarized these contacts in his 'Notitie' (Noorduyn 1983). Presumably because long-distance trade offered the best chances for the VOC, Speelman pays most attention to it, describing Makassar's commerce with Mindanao, Sulu, Macao, Manila, Cebu, Cambodia, Aceh, Banjarmasin, Sukadana, Pasir and Kutei. Sailing to Kutei and Pasir, on the east coast of Kalimantan, was a royal privilege, reserved for the princes of Gowa and Talo, while Portuguese

skippers traded with Macao. Sometimes Speelman gives cargo values. It appears that the Manila trade, which was partly in the hands of the court, was the richest, typically being worth 50,000 rixdollars for a shipload of exports, of which there were two annually. This is much more than the other routes he describes: commerce with Mindanao or Aceh did not exceed the 10,000 rixdollar level for a ship. Unfortunately, Speelman is vague on what was probably regarded as more routine trade, such as that with Timor and its neighbours, Bima and Sumbawa, Buton, Tambuko and Banggai, Seram, Java and Bali, Palembang, Jambi, Johor and Melaka. Nonetheless, the 'Notitie' remains a uniquely rich source.

At the beginning of the twentieth century Eerdmans also made an estimate of Makassar's commercial activities in the pre-conquest decades (H 817:169-75). Makassar's rise as an entrepôt during the first decades of the sixteenth century was closely connected to the possibility she offered for obtaining spices, especially cloves from Ambon and nutmeg and mace from Banda. So it is appropriate to begin our comments with Maluku. However, the Makassar spice market had become less and less important as the Dutch progressively tightened their grip upon the supply in Maluku itself, so that by the beginning of the 1640s only relatively small quantities were arriving in Makassar (Bassett 1958:15; Knaap 1987a:22). Eerdmans estimated the contact with Maluku before 1640 at between 100 and 150 ships each year. This might be too high, considering that annual connections with Central Maluku were maintained by only 20 to 25 vessels (H 817:169; Knaap 1987a:220). If this was about the same level as the trade with North and South Maluku, the overall Moluccan total might be no more than 75. For Nusa Tenggara Eerdmans gave no figures, but concluded that the trade was important. If the assumption of 75 about Maluku is right, it could be that the combined traffic on Makassar's eastern and southern routes, namely with Maluku and Nusa Tenggara, was maintained by between 150 and 200 vessels.

Eerdmans further calculated, probably on the basis of Speelman, that the trade of Makassar included a few vessels for Macao, 3 to 4 to Mindanao, 3 to 4 to Sulu, 2 junks to Manila, 2 to 3 junks to Cebu, a few ships to Siam, 5 to 6 big vessels to Cambodia, 4 to 5 to Melaka and Aceh, 6 to 8 to Banjarmasin, 2 to 3 to Sukadana, a few ships to Kalimantan's east coast and 30 to 40 vessels to Java (H 817:171-5). Consequently, these northern and western routes were sailed by about 60 to 75 somewhat bigger ships, which together with the eastern and southern routes makes a total of about 250 trading voyages or about 500 single ship movements, that is each arrival and departure counted separately.

The authorities of the kingdom of Makassar drew the following taxes from the trade of their realm. First, 10% of the value of all commodities imported or exported overseas, 10% on timber and bamboo transported by

river, and 10% on piece-goods coming from Mandar. Second, for each slave on board 0.25 rixdollar. Third, an anchorage fee of 0.25 rixdollar for each anchor and mast money of 0.50 rixdollar for each mast. Fourth, for each 'wide' ship, meaning a ship with a substantial capacity, such as a *chialoup* or *gonting*, 8 rixdollars. Fifth, smaller vessels paid 0.50 rixdollars per fathom of their length. Consequently, the bigger the vessel the more it paid. Besides these levies, there were various others on local markets and on fishery (VOC 1623:139-40). The taxes on overseas trade were collected by *syahbandar* or harbourmasters, who were usually drawn from the ranks of the commoners of Makassar (Bulbeck 1992:41, 106).

The campaigns between 1666 and 1669 devastated trade networks. As we have noted above, before the war was over the new rules were already established in the Treaty of Bungaya (Stapel 1922:237-47). Stipulations on trade and shipping were as follows. First, all European nations, in particular the Portuguese and the English, were expelled from Makassar and were forbidden to trade there. Second, the VOC was given the monopoly on importing Indian cloth and on Chinese wares, though what is meant by the latter was not clear. Third, the VOC was granted an absolute freedom from tolls. Fourth, all subjects of Makassar had to request a Company pass if they wanted to sail to Kalimantan, Java or the Malayan Waters, the region around the Melaka Straits. For the time being, all trade to Nusa Tenggara was forbidden, probably because of the VOC's ongoing war with its enemies there, in particular Bima. Makassarese were not permitted to sail to Maluku, the Philippines or China. Two of South Sulawesi's other major trading regions were subsequently also forced to accept the same restrictions; in 1670, the kingdom of Wajo had to sign the Treaty of Bungaya, followed in 1674 by the Mandar states (*Corpus diplomaticum* 1931:426-30; Andaya 1981:141, 159).

As noted above, the purpose of the war and the subsequent Treaty was to safeguard the Dutch position in Maluku and hence the VOC's monopoly of the spice trade. The exploitation of economic opportunities was of very secondary importance. Consequently, the VOC was not actively hostile to the considerable local trade, which fed long-distance commerce and supplied the city, as long as it did not infringe upon the special rights of the Company. A lively and contested trans-peninsula trade route was the Cenrana River dividing Bone and Wajo, which linked the east coast with the great inland lakes of Tempe and Sidenreng, whence packhorse paths led to the west coast (Pelras 1996:120). Other rivers also facilitated transport, but given the mountainous terrain coastal shipping was vital. Offshore islands, such as the Spermonde Archipelago, which sheltered Makassar's roadstead, or the more southerly located Tanakeke offered both friendly moorings and sea commodities. Such low-key transactions, and even non threatening long-distance trade, was tolerated.

In theory, a restoration of Makassar's independent (non-Company) commerce was still possible, but only within the confines of the VOC pass policy, which was designed to reserve the most profitable commodities and routes for itself. Already at the end of 1667 Speelman had asked his superiors, the High Government in Batavia, whether it would be wise to allow private traders to resume sailing to most of their previous destinations in Southeast Asia. He advised against permitting travel to Macao and Timor, because he wanted to protect the VOC's projected monopoly on the import of Chinese wares as well as the trade of the VOC's own base in Timor itself. Similarly, in order to safeguard the economies of Dutch outposts Speelman also advised against admitting Makassarese traders to Cambodia and Siam, while the Manila trade should be reserved for Burghers only. He also wanted to know what the policy should be on Makassar's importing of Indian textiles bought in Batavia. He advocated restrictions, with trading permission only being given to Malay skippers and, probably, Burghers (VOC 1267:336r-337r).

The constraints distorted previous patterns, some economic partners who had played a central role for pre-conquest Makassar were now out-of-bounds, and specific routes were reserved for certain communities. Sulawesian traders in particular were discriminated against. Their banning from Spanish colonial ports was particularly dramatic, as Manila had been an important textile market and source of silver coins, as well as of China goods; access to the latter was further restricted by Dutch hostility to ties with Portuguese Macao. Muslim states to the south of Manila, such as the rebellious Islamic polities of the southern Philippines, Mindanao and Sulu, were cut off from Makassar. On their voyages to Melaka Straits ports such as Aceh, Melaka, Johor, Jambi and Palembang, ships from Makassar usually sailed by way of Batavia. Commercial ties with mainland Southeast Asia, direct or indirect, were completely forbidden. Thus, Makassar's sailors were increasingly confined to the waters of the Archipelago and directed towards Batavia. However, ties with some regions were strengthened, as the social and political bonds between Sulawesi homelands and Makassarese refugee communities fostered commerce. This was strikingly the case with East Kalimantan ports like Pasir, Kutei and Berau, but also in Nusa Tenggara, where the Sumbawan kingdoms of Bima and Sumbawa, and settlements like Ende on Flores, continued to be closely linked to Makassar, as were the many dispersed communities of Bajau (sea nomads), the Turijene or water people (Noorduyn 1983:103-16).

During the last decades of the seventeenth century a new trading network was created, in which Burghers and Chinese sailing to and from Ambon and Banda and to Java played a very important role (Knaap 1987a:218-20). Sulawesians, on the other hand, were insignificant as far as Maluku was concerned, mainly plying the routes to and from Java, Kalimantan and certain parts of Nusa Tenggara. One of the VOC's main problems was that it proved

virtually impossible to combine a relatively liberal policy of issuing passes with a strict observance of the monopoly on the import of Indian textiles. Aceh, Johor, Banjarmasin and Pasir were connected with trade circuits outside the Company-controlled Indian textile trade, and provided alternative sources of supply for Makassar's merchants. Consequently, towards the end of the seventeenth century it was stated that Indian cloth sold in the Bugis Market, half a mile to the north of Fort Rotterdam, was often cheaper than that sold in Batavia. Another problem for the VOC authorities in Fort Rotterdam was that skippers sometimes used their passes to sail other, unauthorized routes, for example skippers with a pass for Pasir would often sail first in quite another direction, namely to Bima and Sumbawa, to take in cloth and only then turn northwards to Pasir. At that time, it was in any case common for skippers from places far from Fort Rotterdam, such as Mandar and Buton, and even from nearer harbours, particularly Bone, to sail without a pass. The local authorities used the threat, and sometimes the practice, of confiscation of cargoes in their efforts to curb these undesirable activities (VOC 1436:287-92, 316-8, 335; VOC 1452:127v; VOC 1568:145).

The VOC insisted that a pass from Fort Rotterdam was a prerequisite for engaging in overseas shipping and trade. However, this was hotly contested. At first opponents of this measure were mainly found among the Company's allies. The ruler of Bone, Arung Palakka, tried to obtain the right to issue passes for Buginese traders from his port of Cenrana in about 1685, but the VOC refused (Andaya 1981:268). Other indigenous rulers also wanted this privilege. In 1727, for instance, the prince of Gowa not only tried to obtain a toll-free departure to Batavia for a slave-exporting Wajorese skipper, but also requested the vessel's exemption from inspection at Fort Rotterdam. The VOC authorities stood by their principles, stating clearly that if inspection was refused no pass would be issued (VOC 2072-2:2-3).

The harbourmaster and passes

It seems that within ten years of the peace, trade and shipping had recovered enough to warrant the appointment of a VOC *syahbandar* or harbourmaster. According to Eerdmans, the first such official was appointed in 1678, probably the junior-merchant François Prins of Utrecht, who later was to become a governor of Makassar. Prior to this, shipping was supervised by the bazaarmaster and overseer of the incoming and outgoing vessels; the first mention of such a person found so far, in 1671, was of the assistant or junior employee Evert Pietersz of Ternate (H 817:277; VOC 1281:797; VOC 1347:500). At about the same time Makassar's local VOC-government also issued its first regulations on shipping. On 13 December 1670 an edict was issued announcing

that every arriving vessel had to be inspected by the *fiskaal*, the public prosecutor, or his representatives, had to show its pass, and declare the cargo to the overseer of the incoming and outgoing vessels (VOC 1944:97-8). Within seven years, a full harbourmaster was felt to be necessary. Instead of a mere assistant, the required rank was now junior-merchant. This increase in status was underlined by the fact that François Prins was a Dutchman born in the Netherlands, while Evert Pietersz was 'only' an Indies-born Mestizo.

Apart from issuing and checking passes, the main duty of the harbourmaster was to collect import and export duties: no wonder the position was considered lucrative and popular among Company employees. The harbourmaster was also one of the local VOC's major sources of information on local societies and politics. Consequently, he had to speak one or more of the relevant languages and be sufficiently persuasive to extract all sorts of news 'from the throat' of the departing or incoming sailor (VOC 1663:164). Another of the harbourmaster's tasks was, of course, to check outgoing and incoming traffic for forbidden products. It seems that towards 1700 the VOC considered examination of incoming vessels much more important than that of outgoing (VOC 1452:138), no doubt because of the Company's desire to maintain its import monopoly on Indian textiles. Outgoing ships were only searched when there was an indication that something was wrong. The local authorities were very afraid that routine searches might irritate the seafaring community, in particular when no irregularities were found, and create the suspicion that the VOC wanted to obstruct free trade (VOC 1595:298-9).

Indeed, the VOC in Makassar was not in general opposed to free trade as such. In fact, the local authorities were well aware that it greatly contributed to the welfare of Makassar and other parts of South Sulawesi, and that such welfare was the best guarantee against political disorder. This became particularly clear in the debates between the local authorities and the High Government in Batavia. The latter saw that the VOC's own trade in Makassar was unable to generate substantial profits and ascribed this to weak sales of VOC-imported Indian cloth; hence it proposed limiting private imports of these textiles, which were mainly bought in Batavia. Although the Makassar authorities told the High Government on several occasions that such a limitation would not be wise, in about 1713 Batavia even raised the possibility of restricting private trade in general. Makassar pointed out that according to the treaties the VOC only had the right to curb the trade of its own subjects, namely the Burghers, Chinese, Malays and other *kampung* dwellers in the town of Makassar, not that of subjects of allied principalities. Of course, the local authorities also promised again that control over private shipping and trade would be tightened, in particular for Batavia. Kept from October 1713 onwards, the harbourmasters' registers, as we know them, were the direct outcome of this promise. Moreover, the harbourmaster was not expected to

just wait in his office; during the eighteenth century he also sent his assistants on patrol on the beach in Makassar, reflecting, at least on paper, a commitment to a more assertive policy (VOC 1853:91-2, 99; VOC 1867:41-2; VOC 2345:73).

In 1727 further measures were taken, as it had become apparent that many Sulawesians were failing to show their passes on their return. To put an end to this 'arrogance' it was decreed that every skipper, even those of the allied princes, should have guarantors, who could testify to their good conduct. Moreover, it was decided that henceforth ammunition on board should also be noted in the passes (VOC 2072:158-9). The following year, in 1728, the harbourmaster reported that he and his assistants did not usually pay much attention to the trepang-fishermen, sailing out to collect or purchase 'sea slugs' or bêche-de-mer. Trepang-fishermen, sometimes numbering up to one hundred a month, were given a small pass with a seal of a *schelling*, that is about 8 *stuivers*, while their cargoes were not checked at all. On their return, there were also no attempts to inspect their boats, as this was not deemed worthwhile, so the majority of the returning skippers did not report to the harbourmaster's office. This lack of control meant that fleets of up to 40 vessels were sighted off the coast of Timor and Solor without the VOC having any idea of what was going on. So the harbourmaster was instructed to be stricter in the issuing of passes, to carry out more inspections, and to obtain assurances that the trepang-fishermen would show their passes again on their return. It was also repeated that any incoming skipper, in particular those from Kaili, Mandar or Sumbawa, who had no pass from the VOC, should also report in person to the Governor or his representative. Furthermore, the edict which expressly stipulated that vessels were only allowed to sail to the destination specified in the pass was reiterated. On arrival ships had to anchor first in front of the harbourmaster's office and not evade all Company control by sailing immediately to the Bugis Market or the rivers of Gowa and Talo. Finally, the permitted catchment area for trepangers was limited to the Sulawesi coast between Bira and Pare-Pare. However, this unrealistic restriction did not last long. Within a few months the fishing grounds were greatly enlarged to include Sumba, Manggarai and Ende (VOC 2100-2:64-8, 70-3; VOC 2133:81).

At about the same time, around 1730, there was a brief attempt to make more money out of the export duties. It had been the custom that every departing skipper simply told the harbourmaster what he carried and then paid the dues plus a 1% tax for the so-called weighing-money. But then it was suddenly decided that dry materials should really be weighed and the required fee paid. However, the court of Bone quickly negotiated an exemption from this obligation for Buginese, Makassarese and Wajorese skippers. As any transaction with a non-Sulawesian tended to be liable to the new bureaucratic procedures, now many Sulawesians simply used the

Bone court's exemption as an excuse to evade the tollhouse. Because of this, Chinese traders sailing to and from Batavia complained that they could hardly obtain cargoes anymore. Consequently, the Chinese requested that their commodities need not be weighed either. They promised to submit trustworthy information about their cargo and pay every duty required. The harbourmaster of the VOC admitted that the new regulation caused evasion of the tollhouse and, consequently, was detrimental to control. Therefore, he advised a return to the old custom of just reckoning 1% without actual weighing. Within one year, the whole tightening of procedures was reversed and the old situation restored (VOC 2163:11; VOC 2238:282-5).

A relatively liberal stand was also taken towards small traders from Bira and Bonerate and the surrounding region, with sailing vessels of less than 2 *last*. The *last* as measurement for ships was about two tons (4,000 Amsterdam pounds). These boats, provided they were not violating VOC rules, did not carry passes and did not pay duties, because their cargo was deemed too petty to bear the tax burden. In 1759, to preclude any misunderstandings, it was recommended that the harbourmaster supply them with a small pass of 15 *stuivers*, if they only carried victuals and nothing else (VOC 2964:245-6). In 1769 it was stipulated that such traders' and fishermen's passes should note, in the Makassarese language, that they were allowed to frequent the small islands in the neighbourhood of Sulawesi, up to Bonerate, but were forbidden to go further east or south (VOC 3273:3).

Also in 1769, the VOC decided to introduce an anchorage fee, which was deemed necessary to provide income for the upkeep of the streets and lighting of Vlaardingen. The tariff varied. The annual Chinese junk's levy was set at 50 rixdollars, *chialoup*s at 6 rixdollars, while *paduwakang* were taxed according to the route they sailed. If they were going to Batavia they paid 1.62 rixdollars, to Semarang and Ende 1.25, to Luwu, Buton, Sumbawa and Bima 1, to Tambora, Selayer, Bonerate and Bugis 0.62, to Komodo and other trepang-places 0.31 rixdollars (VOC 3273-2:57-8). Presumably this differentiation reflected rough estimates of the profitability of the voyages. About ten years later, it appeared that many inhabitants of Makassar, in particular non-Christians from the *kampung*, could avoid paying anchorage money, because they already paid another tax for the upkeep of Vlaardingen. This necessitated a new edict (VOC 3580:11).

The periphery: difficulties of control

In the eighteenth century the VOC's control of shipping remained problematic, particularly on the fringes of the area it claimed. One way of strengthening the authority was the annual *kruistocht*, or patrol by the Company's

small Makassar-based flotilla of Asian-built vessels (see p. 52). Occasionally, these flotillas were able to assert VOC power, returning to base with skippers arrested for sailing without a pass, as well as loads of confiscated goods. However, there was also a suspicion that every now and then flotilla commanders abused their power, extorting money or goods from the unfortunate sailors who fell into their hands (Grothe 1854:33).

In Makassar's southern hemisphere, the area bordering the Flores Sea, Bima was a particular trouble spot. In 1701, Bima was accused of harbouring up to 200 traders, Buginese and Makassarese, even VOC subjects, some without Company passes. One of the excuses put forward by the Bimanese was that since 1696 there had been no Company representative there to keep an eye on things. Consequently, that same year the VOC re-installed an official and agreements were also made with the ruler of Bone that every skipper sailing to Bima should have a proper pass. It seems that such measures had some effect (VOC 1647:257; VOC 1663:158-9; VOC 1867:33). More to the southeast, contact with Timor was in principle reserved by the Fort Rotterdam authorities for Burgher, Chinese and Mardijker, that is foreign Asian Christian, skippers. However, by 1722 many Makassarese and Buginese skippers were sailing in the waters off Timor, Solor and surrounding areas, apparently without VOC passes. This led to further restrictions on the issuing of permits to these areas, limiting them to Burghers and other Christians only. It appeared, however, that they found this trade rather unprofitable anyway (VOC 1979:11; VOC 2192:28-30). Such a policy of reserving a certain area for ethnicities under direct VOC control was very much in line with the practice established with regard to Maluku after the Treaty of Bungaya. This trade was mainly the domain of Burghers and Chinese, although Sulawesians sometimes also sailed there in the course of the eighteenth century. However, to safeguard the spice monopoly voyages to Ambon and Banda were specifically forbidden to native-born Sulawesians in 1770 (VOC 800:304-6).

Turning to the north, to the Makassar Straits, it appears that Kaili and Mandar were in reality beyond the harbourmaster's control. Even getting information about what was going on proved difficult. This was obvious in the case of the Burgher Pieter Kraak. In the beginning of the eighteenth century the VOC heavily relied on him for information about, and contacts with, Kaili. However, he enthusiastically abused his role to his personal advantage, for instance by obtaining slaves at a relatively cheap rate, until finally, the VOC had to send its own prosecutor to arrest him (VOC 1759:269-71; VOC 1775:218, 223-5, 238-9). The problem with Mandar was that although skippers from there were obliged by the treaty of 1674 to obtain passes from Fort Rotterdam for every journey overseas, this was actually very impractical. Because of the winds and currents, it was only feasible for Mandar-bound ships returning from Batavia. On departure for Batavia or for destinations in

the Makassar Straits, such as Kutei, Pasir and Pulau Laut, it was difficult and even, in view of the relative value of the commodities, economically highly disadvantageous to stop at Makassar. Cargoes usually consisted of local produce such as mats, bananas and coconuts; such low-value products hardly justified an extended voyage via Makassar. If the VOC wanted to control this petty trade anyway, it would have had to station a *pencalang* permanently in the Straits. As this would be costly, the VOC authorities in Fort Rotterdam advised the High Government to take a moderate stand, and to deal gently with skippers from Mandar and Kaili (VOC 1867:41-2; VOC 1894:62-3).

By the 1730s Mandar and Kaili were not the only places in the Makassar Straits where trade was conducted without VOC passes. Soreang, a western outlet for overland trade from the Wajo heartland, had become a centre for large-scale uncontrolled commerce. It was said that Bone had its own toll-house or *sabandarij* in Soreang and that occasionally up to 30 Sulawesian vessels might be anchored there. So in 1731 the *kruistocht* went in that direction and punished, by violence, a few traders who had sailed with expired passes or no pass at all (VOC 2163-2:64-5; VOC 2192:688-9; VOC 2238:150-2). The VOC also found the nearby small islands off the coast of Segeri and Siang suspicious, as the few Malays and Turijene (sea nomads), who lived there used to receive off-loaded merchandise from ships passing between Batavia, Banjarmasin, Kutei, Pasir and Mandar and then bring this illegally in their small fishing-boats to the Bugis Market or the rivers of Talo and Gowa at Makassar (VOC 2238:153-4). Later in the century, in the 1760s, Mandarese and Wajorese who specialized in evading VOC control and in importing Indian cloth bought from English country-traders in the Melaka Straits, were said to use Soreang, Mandar and Sawito as landing places for their goods. From there it was brought over land, partly by way of the lakes, to Wajo (VOC 3243-3:75-6, 78).

On the other side of the Makassar Straits, Banjarmasin had already attracted the attention of the VOC authorities in Makassar as early as 1702, when they had sent a commissioner there to obtain information. He returned with the report that in the previous season four junks from China had traded earthenware, silk, kettles, hats and other products for pepper. Since these vessels were 15 fathoms long and 4 fathoms wide, or 90 by 24 feet, they seem to have been *wangkang*, or small-sized junks. Most of their commodities were bought by Chinese skippers, who shipped them to Semarang. The VOC commissioner saw no English traders, but he did report meeting a few Buginese and Makassarese, who had VOC-passes for voyages for Pasir, and had brought rice and silver coins to Banjarmasin (VOC 1663:193-9; Knaap 1996:35-6). The year after the commissioner's visit it was rumoured in Makassar that four English vessels had anchored in Banjarmasin to buy pepper and that the number of Chinese junks had reached seven. It seems

that the English, who had entrenched themselves in a pallisaded lodge, had tried to prevent everybody else from exporting the local pepper, even being prepared to obstruct the usual Banjarese trade with the China junks. Eventually, fighting broke out between the Banjarese and the English, leading to the defeat and forced departure of the latter in 1707 (VOC 1676:246-7; VOC 1728:254-5; Noorlander 1935:13).

By 1711 it was reported that the number of Chinese junks trading at Banjarmasin had declined to two or three, and that their return cargoes consisted of pepper, salt, diamonds, wax and birds' nests. A report of 1727 noted that the annual number of skippers of all nations visiting was about 300 (VOC 1808:16; VOC 2072:14-5). This indicates that by the 1720s Banjarmasin must have been more or less equal to Makassar as a trading port. So it is not surprising that the VOC established a permanent post there in 1747 and wrested a monopoly in the pepper trade from the court. However, during the treaty negotiations the latter was able to obtain the concession that every year one junk could come from China. This limitation to just one junk was not always kept, and in the early 1750s it was even reported that four vessels had arrived from China. But numbers seem to have declined during the 1760s, owing to failing pepper harvests and the smuggling of pepper overland to Pasir, where English country-traders were among the buyers. In the 1770s the Chinese junks arriving in Banjarmasin were no longer interested in pepper. As in Makassar, trepang had become the most attractive commodity. A new treaty between Banjarmasin and the VOC in 1787 greatly curtailed the former's independence, as it stipulated that, as in previous years, only one junk per annum should be allowed to trade (Noorlander 1935:17-8, 24, 51, 58, 177).

Much further to the north a thriving trade developed during the course of the eighteenth century between Pasir and its neighbours on the one hand, and the sultanate of Sulu on the other. This trade was conducted by Buginese and in about 1760 it was reported that some 14 to 15 vessels came to Sulu from Pasir every year, supplying the Chinese junks in Sulu with marine and forest produce, just like in Makassar. Moreover, in the 1770s it was claimed that they carried considerable amounts of Moluccan spices as well as gunpowder and armaments, which they had obtained from Batavia and other Dutch settlements. In return the Buginese took opium and slaves (Warren 1981:11-3). All this trade was beyond VOC control. Because of the troubles with Arung Singkang from the 1720s onwards Makassar's Pasir route was practically closed, while from the middle of the 1740s her trade to Pasir and other places in Kalimantan was even officially prohibited. It appeared that Mandarese and Wajorese, being outside VOC control, greatly profited from this prohibition, which was detrimental mainly to the trading communities in Makassar itself and among the Company allies. Following requests to

Batavia by the ruler of Bone and the local VOC government in Makassar the prohibition was revoked in 1768 (VOC 798:548-50; VOC 2964-3:41). In the last third of the century trade in Sulu flourished. It involved one to four Chinese *wangkang* of 100 to 225 *last* each, four English country-traders averaging 100 to 150 *last*, and, after 1790, four vessels of unknown size to and from Manila. Both country-traders and Manila-farers were interested in marine and forest produce for the China market (Warren 1981:6, 8, 40, 43-4, 55, 62).

In the meantime, the trade to the Malayan Waters in the west, around Malaya and Sumatra, was not really prospering, despite the fact that many a Sulawesian migrant community was to be found in the region. In 1709 skippers residing in Makassar complained that trading with Johor was unattractive, because of the vexatious demands of the ruler. As compensation, they requested that the High Government in Batavia grant them passes to Palembang, Jambi and Melaka. Trade to Melaka was already forbidden, but Palembang and Jambi were officially still open. However, the High Government, afraid that the Sulawesians there would turn again to piracy, as they seemed to have done around 1680, was only prepared to grant passes on a very limited number of occasions (VOC 726:98-9; VOC 1775:53-4). Consequently, the trade of Makassar to the Melaka Straits continued at rather low levels and probably came to an end by the middle of the eighteenth century. Outside the grip of the VOC, however, a profitable connection was maintained by other traders. By the 1760s independent Wajorese and Mandarese had established regular traffic with Riau, bringing loads of local Sulawesi textiles to sell for ready cash. Sometimes, they sailed further, to Kedah and Selangor to exchange their money for cheap Indian cloth brought by English country-traders. In 1758 the VOC had tried to penetrate this trade by re-opening Melaka for Makassarese and other Sulawesian allies on the condition that all ports north of Melaka and Siak, on the other side of the Melaka Straits, were prohibited. As it soon turned out that some traders were involved in 'illegal' opium trade, this relaxation was revoked again in 1763 (VOC 788:129; VOC 793:628; VOC 3243:76-7).

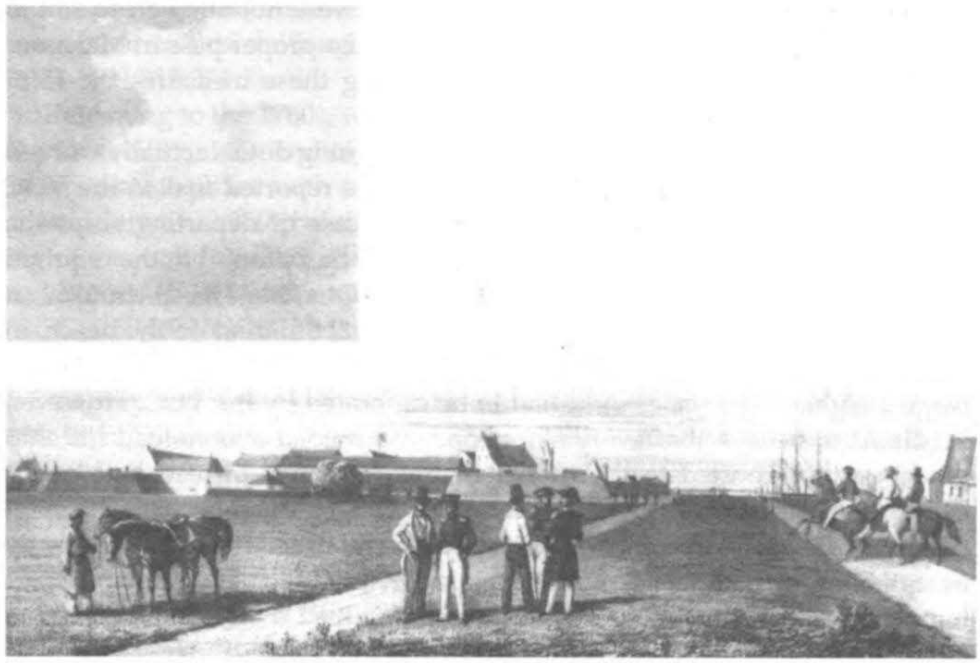
The trade to Java, in particular to the VOC capital Batavia, as well as to the Dutch-controlled ports of Semarang, Surabaya and Gresik, remained open to any trader from Makassar. For several groups of traders Batavia and Semarang were to become very important destinations. Interestingly, the trade from Makassar to Bali and neighbouring Lombok is conspicuous in its absence from the harbourmasters' registers and other eighteenth-century VOC correspondence, although it was not explicitly stated as forbidden in the Treaty of Bungaya (Stapel 1922:237-47). Speelman said in his 'Notitie' that prior to the conquest the Balinese had denied the Makassarese access. During a large part of the eighteenth century, at least until the 1740s, control over Lombok was contested by the Balinese, in particular Karangasem, on

the one hand and Sumbawa, supported by South Sulawesian princes, on the other (Noorduyn 1983:110; Hägerdal 2001:101-7). So it would not be surprising if there was no contact between Sulawesi and Bali for political reasons. However, the tax farmer, discussed in the following section, recorded occasional voyages between Makassar and Bali by 1780. These might have been simply calls en route to and from Batavia or an extension of the journey to Sumbawa. However, we might not totally rule out the possibility that it was a direct connection (VOC 3598-3:n.p.). So far, no further evidence for this link has been found.

The customs farm

In the mid-eighteenth century the harbourmaster lost one of his main tasks, when the VOC decided to farm out the collection of import and export duties by selling a customs monopoly to the highest bidder. This happened not only in Makassar, but also in other areas controlled by the VOC, no doubt because the High Government felt it would thus make a more reliable and clear-cut profit. The customs farm was a crucial institution, as it linked trade revenues directly to the state. Consequently, levels of payment for the farm reflected estimates of the current state of trade, although they might also be kept artificially low, if bids were fixed by a cartel. The ability to control the farm politically was an indication of both power and legitimacy.

According to Eerdmans the VOC farm operated in Makassar from 1754 onwards (H 817:370). However, it appears that in fact it had already started nine years earlier, from 1 June 1745, with regulations modelled on those of Batavia but adapted to Makassarese circumstances. The first farmer, for the remaining seven months of 1745, was the Chinese Quepilong, who paid a sum of 420 rixdollars a month. The next year, 1746, the Captain of the Chinese Lijanko paid only 355 rixdollars per month or 4,260 for the whole year. He appeared to be quite unable to control the shore, except for a stretch for more than a mile to the north and half a mile to the south of Fort Rotterdam. The rivers of Gowa and Talo, and more to the south, of Sanrabone, offered ample opportunities for evasion of payment. At first, members of the local VOC government acted as guarantors for Lijanko, but, because of fear of corruption, this was soon forbidden by the High Government (VOC 2649:31, 222, 224; 2674:21-2). After several other Chinese had held the farm, they suddenly withdrew in 1749, claiming it was too unprofitable. Consequently, in that year the tax farm was taken over for the first time by a Burgher, Coert Axelsz Rosenquist, for a sum of 4,764 rixdollars. However, his tenure lasted only one year, as in 1750, Lijanko, now no longer Captain of the Chinese, obtained the farm for 6,000 rixdollars per annum (VOC 2741:29; VOC 2761:46-7).



C.M.W. van de Velde: Fort Rotterdam in 1846 (KITLV, Prints and drawings 51 Y2)

In 1756, the farm exceeded the 10,000 rixdollar level for the first time, reflecting the general increase in Makassar's trade, which had been greatly stimulated by the annual arrival of the junk from China. In 1760, after eleven years, a Burgher was again able to take over the farm from the Chinese, undertaking to pay 13,920 rixdollars. Unfortunately, he died before the year was over and Chinese businessmen had to come to the rescue (VOC 2883:29; VOC 2990:29-30, 64). This caused trouble. The next year, in 1761, two Chinese, Lisinko and Thesoenko, having initially taken the farm for 12,000 rixdollars, decided to repudiate the contract, partly because a new round in the war between Bone and Wajo damaged trade, and partly because they were worried about skippers manipulating the pass system in order to pay lower duties. Several small traders, wanting to sail to such places as Buton, Bonerate, Kaili and Pasir, had evaded duty by taking a pass for Bone, Bantaeng and Mandar, where they tried to obtain a new pass for the next stage of their journey. The authorities in Fort Rotterdam responded to the farmers' complaints by stipulating that no outpost VOC official was allowed

to issue passes. Furthermore, Butonese traders were not allowed to sail to Bugis and hence home, unless they had obtained a proper pass in Makassar (VOC 3023:31-2, resolutions 28-9). After issuing these measures the farm was resumed by the Chinese.

How the tax farmer for the incoming and outgoing duties actually worked is difficult to say. It seems that incoming vessels reported first to the VOC harbourmaster and then to the farmer. In the case of departing ships the harbourmaster would only issue a pass when he had proof that the required duties had already been paid to the farmer (VOC 2964-3:41-2). In 1762, it was stipulated that the farmer had to erect a small building on the beach, in front of which every incoming or outgoing skipper must anchor and have his cargo weighed. The scales used had to be calibrated by the VOC. However, it is hard to believe that every skipper would unload and re-load his ship whenever he reported to the farmer or his assistants. Instead, one might expect that the latter, without an actual weighing, bargained with the skipper about the cargo and the required payment in order to reach a mutually acceptable deal. The rate was in principle 5%. What actually seems to have happened is, that the tax farmer and his staff valued the cargo according to a list of products and prices drawn up by the VOC in 1728. The farmer and the skipper were then supposed to come to an agreement, if the difference between their respective estimates was less than 20%. This practice resulted in a tariff which was often not 5 but a mere 4%. Of course, the list of 1728 became obsolete over time and hence a source of tension between the parties involved. In 1773 the list was finally dropped. From then on an assessment of current market prices in Makassar was the main guideline for taxation. If both parties were not able to agree on these, the farmer was allowed to take his share in kind rather than receive money (VOC 3058:28, 66; VOC 3181-3:51-4; VOC 3412-2:10-1).

During the eighteenth century there were occasional discussions with the court of Bone about the right to control shipping and trade, reflecting both fundamental disagreements about definitions of sovereignty as well as Bone's ambitions. According to Eerdmans, by 1770 the ruler of Bone was even advising his subjects to avoid Makassar as much as possible. In February 1774 the current Chinese customs farmer seemed to have done a deal with Bone, in which it was agreed that the farmer and his assistants were allowed to collect duties in the Buginese settlements around Makassar in return for a payment of 1,000 rixdollars. Later this was increased to 1,500 rixdollars. Probably as a result, VOC records of 1781 mention an overseer of the tolls on behalf of the ruler of Bone, who was attached to the tax farmer's office. This person seems to have been in charge of collecting the duties at the Bugis Market to the north of Fort Rotterdam. After 1785 Buginese skippers even seem to have gone so far as to completely refuse to pay any tolls

in Makassar. By then, according to Eerdmans at least, the VOC was too weak to respond to this challenge (VOC 2238:404-5; VOC 3598-2:n.p.; VOC 3905-3:154-5; H 817:371-3).

Returning to the 1760s, we see that the tax farm experienced a sudden fall in profitability at the end of 1765 and the beginning of 1766. In the first year, Thesoenko, together with other Chinese businessmen, held the farm for an annual sum of 12,000 rixdollars. Then came word from Batavia that the coming of the junk from Amoy was forbidden, a step in the High Government's continuous efforts to channel the China trade to maximize Company profits (VOC 3150:33; VOC 3181:51-2; see p. 145). This caused a drop in payment for 1766 to just 8,244 rixdollars. Moreover, the Chinese withdrew from the farm once again, and it was taken over by a Malay, Intje Sadolla. His official name was Intje Ali Asdullah, the son of another well-connected Malay trader, Intje Abdul Rachman Datuk Sabutung. His mother was a granddaughter of the ruler of Talo. The story goes that Intje Sadolla had previously been asked to become Captain of the Malays, but had preferred to try his luck in business rather than in this semi-bureaucratic position. However, fortune was not to be his – at least, not yet. Within a few months the local VOC authorities were already complaining that the Malay farmer and his assistants were unable to run the farm effectively, and that it was preferable to have a Chinese in command (VOC 3181:30, 89-90; SKIM:10, 43; Sutherland 2001:412).

The next year, 1767, the Chinese were indeed back again, with Thesoenko obtaining the farm for 13,020 rixdollars per annum. However, the Malays were not to be outdone so easily. In 1768 they recaptured the farm for 14,376 rixdollars. This time the farm was probably not taken by one person but collectively, by a group of wealthy Malay businessmen, led by their Captain, Abdul Kadir, Intje Sadollah's older brother (VOC 3210:22; VOC 3243:19; SKIM:5, 43). In 1769, when the Amoy junk was officially allowed to enter Makassar again, the Malays did not concede defeat but bid 16,080 rixdollars for the farm (VOC 3243:42; VOC 3273:30). A year later, for about the same sum, Intje Sadolla was back as the main farmer, replacing his brother Abdul Kadir. Unfortunately, in 1770 the Amoy junk did not show up, which obliged Intje Sadolla to request the High Government for a discount on the contracted sum. Subsequently, the situation recovered, partly because of the re-emergence of the junk. Despite this centrality of the China connection, it was only in 1773 that the Chinese were able to regain the farm for a sum of 17,280 rixdollars (VOC 3302:19-21; VOC 3384-2:11).

After three years of Chinese control over the incoming and outgoing duties Intje Sadolla, heading a group of Malay businessmen, won the day again in 1776. This time he paid 18,000 rixdollars. He had been able to oust the Chinese by promising the VOC that he would take the farm for a five-year period and that he would not under any circumstances apply for

discounts. If Intje Sadolla was to die, his sons would take over. However, within a year, Intje Sadolla was already requesting a reduction in his payment, because of trade disruption due to the rebellion of Sangkilang alias Batara Gowa. This time, remembering the conditions under which the farm was granted, his plea was rejected by the authorities (VOC 805:427-9; VOC 3465:17-8; VOC 3493:155).

Nevertheless, in reality his estimates of the state of trade could not have been too discouraging, because in 1781 Intje Sadolla renewed his contract for another five years at the same annual fee of 18,000 rixdollars, hoping that during such a long lease he could recoup the losses caused by the war, which already amounted to about 10,000 rixdollars. At the time he was conducting the negotiations for a new contract the Fourth Anglo-Dutch War had not yet begun, so he was not to know that more trouble was on its way. In that same year Intje Sadolla was accused of serious misconduct by a powerful group of 34 Chinese traders from Makassar and Batavia, who claimed that he generally took 7 to 8% instead of 5% in duties, and sometimes even more. Moreover, they said, he was taxing all sorts of small merchandise, such as fruits and fish, which had hitherto been exempt. The Chinese complained that such extortion had almost ruined them and that Makassar's trade would only thrive when the tax farm, as previously, was auctioned annually instead of being contracted for a five-year term. The local authorities held an enquiry, and concluded that Intje Sadolla had not committed any irregularities. The complaints had been concocted by four Chinese businessmen, who were set on his downfall. On this occasion, it also appeared that the tax farmer kept written records of payments (VOC 809:814-21; VOC 3598-2:21-2, 153-6, n.p.).

Nonetheless, in 1785, just before Intje Sadolla's five-year contract expired, the VOC did debate what to do next. Resuming annual auctions of the customs farm was one of the options. The local government in Makassar expected that this would lead to an increase in the lease sum in the first year, but was not sure that the VOC's proceeds would remain stable in the long run. Meanwhile, Intje Sadolla had requested an extension of his farm, as once again, he claimed, his high expectations of five years ago as to income had not materialized, since the Fourth Anglo-Dutch War had created a scarcity in European commodities and Indian textiles. An argument in his favour was that he had good relations with the indigenous rulers and other powerful Sulawesians, in particular with the Bone court. The VOC feared that if a Chinese farmer took over frequent quarrels were to be expected. Finally, it was decided to grant Intje Sadolla the farm for another three years for an annual sum of 18,000 rixdollars (VOC 820:964-5; VOC 3700:33-4, 97). The deliberations over the customs monopoly underline that this was not a straightforward commercial deal, as both farmer and Company had to try to assess the likely value of Makassar's commerce in turbulent times.

Before the three years had passed, Intje Sadolla again requested the High Government to grant him another five years for the same amount. They agreed, because he had shown himself to be trustworthy over such a long period, and because of his history of good connections with several Sulawesian courts, to some of which he was related. But now there was one exception to this harmony, and that was the court of Bone, which had recently complained about him. However, the complaints had been rejected, and by continuing to support Intje Sadolla, the Company wanted to show Bone that the VOC stood firm (VOC 820:965-7; VOC 3809-2:71; VOC 3858-2:13). However, a year later, in 1790, Intje Sadolla no longer ran the customs farm. He had probably withdrawn for both financial and political reasons. At the end of 1789 Buginese traders owed him the considerable amount of more than 5,000 rixdollars, probably at least partly because these traders, backed by the court of Bone, increasingly refused to pay duties after 1785. Consequently, in 1790 the Chinese regained control of the farm, in the person of Oeynjeko, who undertook to pay the extraordinary sum of 21,780 rixdollars per annum (VOC 3905-2:38; VOC 3905-3:152-5).

Before closing our discussion of the customs farm, we should consider whether or not there was a clear relationship between the amount paid by the tax farmer in the second part of the century and the total value of Makassar's trade. The local VOC government in Makassar, as in Java, probably had little idea of the farm's profitability (Knaap 1996:146). But, considering the above account and assuming that economic considerations in a free market were dominant, then it is clear that a farmer must have expected that the proceeds from the duty of 4 to 5% would exceed the contracted sum plus his expenses. So, presumably, the contracted sum was at least equal to 4% of the total anticipated value of trade. Around 1770 the lease cost was about 15,000 rixdollars, and towards 1790 it reached 20,000, leading us to expect that the total value of private imports and exports in Makassar around those two years should have been about 375,000 and 500,000 rixdollars respectively. Whether this is realistic or not also depends on the extent to which the farmer himself had a good grasp of the situation, and the relative role of other considerations, such as competition between communities and the search for status within one's own group. The issue of the total value of trade will be addressed again later on (see pp. 124-7).

With regard to the actual rate of duties, it is interesting that two extracts from Intje Sadolla's own books have survived, as they were given to the VOC, first, as evidence in the above-mentioned conflict with some Chinese businessmen in 1781, and, second, as proof of the Buginese traders' payment arrears at the end of the 1780s. In both cases the entries in his accounts barely correlate with the harbourmasters' registers. Names and dates usually did not match, probably because Intje Sadolla recorded owners of cargoes

or parts of cargoes rather than skippers. In the case of the Chinese plaintiffs, Intje Sadolla's entries showed that they usually paid the official 5% duty, rather than the 7 or even 8% they claimed he was extorting. The list of Buginese debtors, indicated as 'traders with their subject sailors', is even more difficult to interpret. It seems that the majority owed the farmer small amounts of money, less than 50 rixdollars. On the other hand some of the debts had run into really high amounts, of 300 to more than 500 rixdollars (VOC 3598-3;n.p.; VOC 3905-3:158-9).

Despite the many uncertainties, a few details from Intje Sadolla's books are useful in giving an idea of the sums involved. For example, in 1776 Oeynjeko, who was later to become a tax farmer himself, paid 162 rixdollars duty for a cargo estimated to be worth 3,248 on arrival from Batavia. According to the harbourmaster's registers the cargo consisted of six different sorts of commodities. The amount he paid was far more than his colleague Petjongseng, who paid 88 rixdollars on his departure to Batavia and 41 on his return. According to the harbourmaster he carried 140 *pikul*, a *pikul* being 125 Amsterdam pounds, of trepang to Batavia and brought back six different items of merchandise. On going to Sumbawa, Litaylo was charged almost 9 rixdollars for carrying small quantities of silk and gold thread, on coming back he paid a little over 12, for 16 *pikul* of cotton and about 125 *pikul* of rice. Later that year, he sailed to Bugis for 41.5 rixdollars, with amongst other goods 80 *pikul* of cotton; returning cost him 59 rixdollars, mainly for 45 *pikul* of trepang. In about the same period, Lisianko went to and from Bima twice. The first time his arrival duty was almost 42 rixdollars, for about 40 *pikul* of agar-agar, and the second time almost 62, for 39 *pikul* of trepang. On the first departure he paid 53 and on the second almost 19, for 5 and 8 different sorts of commodities, respectively (VOC 3598-3:n.p.).

Another example of taxation of trade can be obtained from the personal accounts of the Company employee and private trader Jacob Bickes Bakker, concerning two return journeys from Batavia in 1769 by his business associate, the skipper Barend Jansz, carrying richly varied cargoes. On the first journey the skipper paid almost 50 rixdollars to Intje Sadolla and on the second 49. In the first case the rate was a neat 4% of the cargoes' purchase price, in the second it was only 3.2% (Koopmansboeken 16:31-5-1769, 31-12-1769).

These examples make it clear that on the same route the sum to be paid could vary greatly, which had, of course, everything to do with differences in the composition of the cargo and the quality of the commodities. On the other hand, considering the amounts involved it is justified to conclude that customs were generally not excessive and hence not detrimental to trade as such.

The trade of the VOC

In the preceding sections we have considered the general features of the trade administration in Makassar, here we turn to the actual commerce of the VOC itself. As will be pointed out elsewhere (see p. 52), a relatively large part, about one-third, of VOC shipping in Makassar consisted of patrol vessels, which carried no commodities. Unfortunately, the information about Company vessels that did carry cargoes is far from complete. In fact, there is no systematic information about the connections between Makassar and other VOC-occupied areas, except for contacts with the general rendezvous in Batavia, although the latter, theoretically at least, might be the most important. For example, there are no data whatsoever about what the VOC sent from Makassar to its outpost on Bima, while availability of sources about the connections between Makassar and the Moluccan provinces leaves so much to be desired, that no clear picture is possible either. Consequently, the impression presented here of VOC trade is almost entirely derived from the Batavia traffic, which was mainly incoming. But even here the sources only provide a partial picture, based on the huge Company *spiegelschepen*, the East Indiamen. VOC Makassar had hardly any exports of its own. Hence, it will be no surprise that Makassar, conquered as it was for political rather than economic reasons, always made a loss in the bookkeeping of the VOC. In the eighteenth century the trade of the VOC itself in Makassar was usually no more than 1% of its total Asian turnover (Jacobs 2000:31, 230).

Table 1. Annual average number of items and value, in guilders (rounded-off), of incoming cargoes on board VOC *spiegelschepen* from Batavia

	number of items	total value	cash	Indian cloth
1720s	134	129,262	80,000	23,509
1760s-1770s	25	[78,134]	47,845	23,149
1780s	?	144,155	109,021	17,370

Table 1 is based on information for a rather limited number of ships. The data for the 1720s concern the *Bellevliet*, *Wassenaar* and *Kiefhoek*, which sailed in 1723, 1724, and 1726, respectively (BG 10762:50; BG 10763:148-9; BG 10764:133-5). Those for the 1760s and 1770s concern the *Rotterdam* and the *Huis te Bijweg*, both sailing in 1767, the *Vrijburg* of 1769 and the *Asschat* of 1776 (BG 10788:97-8; BG 10789:88; BG 10792:88). Information about the 1780s is even more incomplete, covering parts of the cargoes of the *Meeuwtje*, sailing in 1787, the *Hoorn* in 1788 and the *Pollux* from 1789 (BG 10799:174-5; VOC 3767:523v; VOC 3776:3921-2). On average, the High Government in Batavia

sent only one *spiegelschip* a year to Makassar. Sometimes, smaller, Asia-built vessels were also dispatched with commodities, but information about their cargoes is scant, and compared to a *spiegelschip* their loads were of minor importance.

One of the first things to be noted when comparing cargoes of the 1720s with those of the 1760s-1770s is that the number of items on board as well as the total value was much higher in the earlier years. In the 1720s the administration was quite detailed, mentioning each individual item. In later periods all the necessities for the VOC's internal organization were no longer recorded individually. However, as the average volume of the ships of the second half of the century was about 1.5 times that of those of the first, it is unlikely that the total value of the former was really only about 60% of the latter. On the other hand, there is also no reason to think that the value of the cargo of the bigger ships of the 1760s and 1770s exceeded those of the smaller ones of the 1720s, if we consider the amount of money they carried. In the 1720s, this averaged approximately 80,000 guilders or a little over 26,500 rixdollars, while around 1770 it barely reached 50,000 guilders or, at the VOC's new monetary valuation of 1767 (*Verhandeling* 1786:295), almost 21,000 rixdollars. This decrease is because in the early part of the century VOC ships continued their journey from Makassar to Bima to take in sappanwood and sail back directly from there to Batavia, while later they did not. Consequently, around 1770 less ready cash was required on ships calling in Makassar. However, the amount of money sent rose again after 1780. A partial reason might be that the amount of textile imports was decreasing. As far as the nature of the money was concerned, it has to be stressed that in the first part of the century it was all silver coinage, while later copper coins, in particular *duiten*, were added.

From the cargoes given in the preceding table, it seems that VOC imports of Indian cloth remained fairly important throughout the century. Measured in money, they comprised 20 to 25% of the value of imports. Only after 1780, when the VOC's access to the Indian market had deteriorated because of the Fourth Anglo-Dutch War, did the value of textile imports fall below 15%. Nonetheless, before that time Company officials complained repeatedly of their own lack of success in the Indian textile trade. This discontent focused on the fact that the Company was not the only source of Indian cloth in Makassar, as private traders were allowed to import it, providing that they bought it from the VOC in Batavia, with or without the intervention of Batavian brokers. As will be shown elsewhere, the extent of this trade was considerable (see pp. 113-6). It was also always said that local traders brought in Indian cloth through circuits regarded as 'illegal' by the Company, such as those operating out of Johor or neighbouring areas around the Melaka Straits. Another factor depressing the VOC's own trade was the substantial commercial textile production in Sulawesi itself of, for instance, Buginese

and Selayar's cloth. Around 1710, the VOC authorities in Makassar deplored the fact that imports from elsewhere and domestic production combined to ensure that they themselves were unable to make profits of 50% or more. They hoped that the High Government would not blame them too much for this, as private imports were hard to prevent, and action against domestic production was deemed impossible. When, a few years later, the High Government suggested that VOC sales in Makassar could become more profitable if shipping to and from nearby places was limited, thus blocking competitors' imports, the Fort Rotterdam authorities responded that this might damage sales even further, as export by private traders to surrounding regions was necessary to keep demand at an agreeable level (VOC 1808:55-7; VOC 1894:38).

In the 1720s the VOC in Makassar imported an annual average of 4,707 pieces of cloth of different sorts and sizes. The most important types of Indian textiles, as far as value is concerned, were Coromandel *salempores*, both the blue and the red varieties, Coromandel red *parcalles* and ordinary chintzes from Surat. Measured in numbers, the order was as follows: Coromandel *parcalles* 1,220, Coromandel *salempores* 707, Surat chintzes 640, Surat *baftas* 600 and Coromandel *chavonis* 400. The Coromandel *parcalles* were plain cotton cloths of approximately 5.5 to 7.5 meters length, *salempores* plain cottons of about 13.5 to 21.5 meters and *chavonis* bleached cotton muslins of 11 to 14,5 meters (Laarhoven 1994: Appendices 16, 47, 55, 56). The Surat chintzes could be either cotton or silk and lengths could vary from 2.5 to 28 meters. Considering the invoice price of about 1.0 rixdollar, it is likely that in Makassar the narrow cotton variety rather than the silk was traded most. However, the most important thing about the chintzes was that they had very elaborate motifs of flowers, birds and leaves, which made them attractive to the public. The *baftas*, in this case plain black ones, were cottons of about 6.5 to 15 meters length (Laarhoven 1994: Appendices 5, 6, 18, 19).

Towards the end of the 1720s, the VOC in Makassar briefly contemplated the possibility of selling Indian cloth below the 50% profit margin. The reason was that private imports, particularly those by Wajorese skippers, were on the decline. By being flexible on prices the VOC hoped to partly fill the vacuum left by the Wajorese, both in Indian textile imports and Buginese cloth exports (VOC 2133-2:116-8, 120-2; see p. 150). In 1730 the profit margin was indeed lowered to 40%. But sales did not immediately respond to the change in prices (VOC 2192:142-3). During the 1730s and 1740s sales remained unimpressive in the eyes of the VOC itself, with Arung Singkang's war being the main cause of stagnation. In 1745 the High Government obliged the local authorities in Fort Rotterdam to sell the cloth at public bi-monthly auctions by the pack, which might contain between 40 and 280 pieces of cloth (Appendix 1), instead of selling piece by piece at a set price

whenever a merchant turned up in the VOC shop. This change of policy was a complete disaster as traders were not prepared to buy such large quantities. To improve the situation, in 1746 the local authorities decided to auction not by the pack, but by one or half a corg, namely twenty or ten pieces (VOC 2649:273-4; VOC 2674:16, 142-3). A few years later, on different occasions the VOC even considered giving credit to buyers and lowering the profit-margin further to a bare 30% (VOC 2717:135-8; VOC 2741:34).

In 1768 the harbourmaster Jan Hendrik Voll was asked to investigate the decline of the textile trade. He began by describing the impoverishment of Makassar's traders, by which he probably meant the Burgher community. The traders complained that the VOC had raised textile prices over the years while quality had deteriorated. Moreover, the fishermen of trepang and karet (tortoise-shell), most of them sea-nomads, had become tougher in bartering sea-produce against textiles. Furthermore, if Indian cloth bought from the VOC could not be sold by the local traders, their only way out was to re-export them to Batavia, which made everything very expensive, as they were liable for export and import duties and sometimes freight-costs as well. Finally, Voll mentioned the problem of 'illegal' imports into Sulawesi of cheaper Indian textiles bought from English country-traders. To curb this illegal trade, he advised stepping up cruise patrols to intercept 'smugglers'. The number of cruisers should be increased to twelve and they should all be smaller craft capable of searching small bays and entering rivers and creeks. These boats should be divided into three groups, guarding first, Sumbawa, second, the Gulf of Bone, and third, the west coast of Sulawesi from Makassar to Mandar. Finally, he recommended the toll-free export of cloth bought at the VOC's public auctions (VOC 3243-3:74-6, 79-80). As far as can be ascertained, none of Voll's suggestions were ever put into practice.

Around 1770 the annual average Company imports of Indian textiles amounted to 3,687 pieces; less than in the 1720s. A comparison of the different types of cloth also reveals obvious changes in market preferences since the 1720s. Measured in value, the most important were the *guinees* from Coromandel; second and third were Coromandel *betilles* and Bengal *cassas*. The largest in numbers of pieces were: Coromandel *guinees* 907, Coromandel *betilles* 800, Coromandel *parcalles* 440, Bengal *cassas* 373 and Coromandel *muris* 366. The Coromandel *guinees* were very long, plain white cottons, of 34 to 47.5 meters. *Betilles*, in this case the plain bleached and hence cheaper ones, were cotton muslins of about 20 to 26.5 meters long. *Parcalles*, as mentioned above, were plain cottons of about 5.5 to 7.5 meters, while *muris* were plain cottons of about 7 to 12 meters. The Bengal *cassas* were usually plain cotton muslins of 8.5 to 27.5 meters (Laarhoven 1994: Appendices 8, 9, 15, 32, 33, 44, 47). Although the reasons for this shift in preference over time are not known, the change in itself confirms the dynamic character of the VOC Indian textile

trade as postulated by Laarhoven (1994:196). Nonetheless, it has to be noted that the annual average of VOC Indian textile imports presented here never exceeded the 5,000 piece level. This is far less than the 15,000 pieces which appear as a rough average in the graphs of Laarhoven. The explanation for the difference with Laarhoven might, in part, be the use of different key years. Perhaps the years of the early 1730s and late 1750s used by Laarhoven showed peaks in the imports (Laarhoven 1994:368).

By the 1780s annual average imports were only 1,857 pieces, about half the level of the 1760s and 1770s. Measured in value, *guinees*, most of them from Coromandel, were the most significant; they covered about 75% of the total value of the VOC's imports. Second were chintzes, probably from Bengal, and third Coromandel *rumals*. As described above, Coromandel *guinees* were long, plain white cottons of 34 to 47.5 meters. Bengal chintzes could be either of cotton or silk and measured between 2.5 and 28 meters. Coromandel *rumals* were a sort of handkerchiefs, mostly of silk, which were sold in squares of 0.5 to 1.35 meters (Laarhoven 1994: Appendices 18, 32, 53). In terms of pieces the order was: 1,072 Coromandel *guinees*, 383 chintzes, 133 Coromandel *rumals*. Other varieties were only turned over in very small quantities. So throughout the century one sees a decline in the VOC's Indian cloth imports. However, as has been shown there was one variety, which showed an opposite trend, namely the Coromandel *guinees*. It seems that the VOC concentrated heavily on this variety, leaving the other varieties to the private sector (see p. 115).

Of the other commodities on board VOC ships, during the 1720s the most valuable appeared to be large barrels of bacon and butter to feed the garrison. As the butter originated in the Netherlands, it had come a long way to reach Makassar. Then there was a regular supply of between 80 and 160 *pikul* of iron in different sorts and sizes, most of which must have been intended for use in the local workshops of the Company artisans. As noted above, such commodities were not intended for trade and hence were no longer specifically listed after about 1770.

Summarizing, it can be concluded that the extent of the VOC's own trade was not as important as would be expected given its relatively high share in Makassar's shipping, to be discussed later on (see pp. 68-9). In fact, the only significance of the VOC as trader lay in its Indian textile imports, while there was not much that was significant in outgoing cargoes either. The only items exported on a more or less regular basis were rice and slaves. However, the latter were often carried by private traders, who had obtained a contract to supply the VOC slave-quarter in Batavia (see pp. 116-20). As has been noted, rice was obtained as tribute from the VOC's Northern and Southern Districts. In the 1720s these deliveries amounted to an annual average of almost 14,000 *pikul* (Coolhaas 1985:13, 76, 134). To feed its local garrison, the VOC had to

keep about 4,000 *pikul* in store, while another 5,000 to 7,500 *pikul* were sent to other provinces (Coolhaas 1985:4, 60, 76; Van Goor 1988:208, 489). The remainder of the levy was probably occasionally sold in Makassar's private market. The income of this tribute tended to decline during the second part of the century, mainly because of Bone's increasing influence over the Northern and Southern Districts, leading ultimately to actual control (H 226/2:225, 245).

Summary

The Company town of Makassar, founded on the ruins of the capital and kingdom known by the same name, closely resembled other major colonial strongholds in early modern Asia. Its centre was the strong and spacious Fort Rotterdam, from which the Governor and Council of the local VOC could see the ships moored in the roads. The fort was surrounded by concentric circles of settlements, their geographical proximity reflecting degrees of integration into the world of the VOC. Europeans and Mestizos, Burghers as well as VOC employees living on their own, lived closest to the fortress; then came the settlements of Asian 'migrant' communities, in particular Chinese, Moors and Malays, and finally, there were the ethnically clustered *kampung* populated from Makassar's own hinterland, housing Makassarese, Buginese, Wajorese and Galesongers, to name just the most prominent.

Dutch Makassar had been occupied for strategic, not economic reasons, to guard the Company's Moluccan spice monopoly. It seems to have been a success, in that until the end of the eighteenth century spice 'smuggling' was very limited. However, Makassar itself was not an economic success for the VOC. Apart from Indian cloth imports its trade was insignificant, and even this declined during the eighteenth century. As for private shipping and trade, VOC policy was based on three cardinal points: trade in spices was forbidden, imports of Indian cloth were restricted, and shipping patterns were to be regulated through passes.

This pass system was the responsibility of the VOC's harbourmaster, who restricted navigation to those areas which the High Government in Batavia chose to open to the private sector, and checked for contraband. However, the principles formulated on paper were often hard to implement in practice. The vastness of the area under the Makassar VOC's supervision, stretching as far as the Makassar Straits and to all the shores of the Flores Sea, simply made effective control impossible. Although the Company managed, to some extent at least, to limit 'undesirable' developments by way of diplomacy or the occasional despatch of its patrol boats, evasion always remained possible. Nearer to home, in the peninsula of South Sulawesi itself, control was

hampered by powerful 'allied' princes. Given the recalcitrant realities of South Sulawesi's geography, politics and economics, it was inevitable that the VOC's attempts to manipulate trade often produced frustration for itself, and probably also irritation for the region's merchants.

Time and time again local authorities grappled with the question as to which categories of shipping and trade should be controlled and taxed. The rule of thumb was that restrictions were only meant to apply to Makassar's overseas or external connections. However, definitions of where exactly the overseas world began and where one could still speak of Makassar's domestic ties were far from cut and dried. Moreover, as far as the 'feeder lines' or subsidiary shipping routes were concerned, there was uncertainty as to how crucial these were to the overall trade and to whether or not trade on such a route was substantial enough to fall under the regulations. There were also very different estimates as to the beneficial or threatening nature of local trade. Consequently, discussions about exemptions and enforcements recurred regularly. Given their awareness of the difficulties in implementing the rules, the local VOC authorities tended to be more 'liberal' than the High Government. They were also more concerned with the viability of the local community. Batavia's preoccupation with ensuring that Company income would be increased was no doubt the main reason that after 1745 tax farming of customs was introduced. Fierce competition for the position of farmer developed between Makassar's Chinese and Malay trading communities, influenced by both the impact of Chinese shipping and indigenous politics. Although the tariffs to be paid to the harbourmaster and the tax farmer were generally not excessive and hence no obstacle to trade and shipping, the commerce of Makassar suffered from the political instability in its environment and, perhaps, from competition by local princes offering cheaper harbour facilities.

CHAPTER III

Makassar's seaborne traffic

In this chapter the structure and development of both VOC and private seaborne traffic in and around Makassar will be discussed. First a description will be given of the 'hardware' of this traffic, namely the ships and the arms on board, then of the 'actors', the skippers, crews and owners, and, finally, of the 'performance' of the sector. The last covers the volume, direction and seasonal nature of movement as well as time spent at sea and in the roadstead.

The ships

The most frequently occurring types of ship in the private sector are listed in Table 2. The first, the *chialoup*, was originally designed to operate in North European waters. The last, the *pencalang*, came from the western part of the Archipelago, namely the Malay-speaking areas around the Straits of Melaka, while the *gonting* was from Java. Since the end of the seventeenth century both the *chialoup* and the *pencalang* were produced by Javanese and Chinese shipwrights in and around Rembang in Java (Knaap 1996:34-5). The other two types in the table, the *pankor* and the *paduwakang*, were indigenous designs from Sulawesi.

Table 2. Average number of crew and size of the most important private sector ship types (rounded-off)

	crew	size (*last*)	*last* / crew
Chialoup	21	31	1.5
Gonting	16	8	0.5
Paduwakang	13	6	0.5
Pankor (1780s excl.)	9	2	0.2
Pencalang	17	11	0.6
All ship types	13	7	0.5

The *chialoup* was a fore-and-aft rigged ship, usually with one mast and one

deck, some 55 to 75 feet long and almost 20 feet in the beam. Some of the Java-built *chialoup* still had two lateral rudders, one for each side of the hull, in the Southeast Asian tradition of shipbuilding, while others were already equipped with a single rudder, amidships in the stern, as in Europe. A comparison of the average size of *chialoup* visiting eighteenth-century Makassar with those active in Java during the 1770s reveals that the former were somewhat smaller in volume than the latter, namely 31 as against 40 *last*. Crew numbers were approximately the same (Knaap 1996:36).

The technical specifications of the eighteenth-century *gonting* are still far from clear. Its length was probably between 40 and 60 feet. Whether it had one or two masts and one or two lateral rudders is not known, nor is there any evidence of a deck. The *gonting* appearing in Sulawesi were usually somewhat smaller than those of Java during the 1770s. In sharp contrast to this was the fact that crew numbers were considerably higher in Sulawesi than in Java, 16 as opposed to 10. The *pencalang* of Makassar on the other hand were, with 11 as opposed to 9 *last*, somewhat bigger than those of Java. However, crew numbers were once again significantly higher in Makassar, about twice as many as in Java. The length of *pencalang* calling at Makassar must have been similar to that of the *gonting*. The *pencalang* had usually one deck, one mast and one lateral rudder (Knaap 1996:34).

It has been argued elsewhere that Southeast Asia's private maritime sector saw many a hybrid form of vessel (Reid 1992a:179; Knaap 1996:150). Comments in the local VOC lists mentioned above show that the line between a *chialoup*, a *gonting* and a *pencalang* could be vague. For example, the local authorities explained that changes in the registration lists of foreign models of vessel with home-port Makassar were because a *gonting* had been converted into a *chialoup*, while a newly-bought small *chialoup* had been registered as a *pencalang* (VOC 1882:6-7).

For the non-Sulawesian ships, in particular for the first part of the century, we can get some idea of their age from the above-mentioned lists. In 1717 and 1723 the average age was between 7 and 8.5 and between 10.5 and 11.5 years respectively (VOC 1894:77-80; VOC 1995:94-9). In 1717 the maximum was 17 years and in 1723 it was 22. The reason why both the average and the maximum age was higher in 1723 than in 1717 was because in 1714 the VOC prohibited ship imports from Java without the explicit consent of the High Government in Batavia (VOC 734:425; VOC 1853:25; VOC 1882:9-10). Trading vessels also became the object of taxation. In 1743 the local government of the VOC in Makassar decided to introduce a tax on houses and ships to generate income for the upkeep of the settlement of Vlaardingen. The annual sum for a vessel exceeding a volume of 20 *last* was 1.5 rixdollars. Ships from 15 to 20 *last* were taxed at 1 rixdollar, those of 8 to 15 *last* 0.5, those from 3 to 8 0.25 and those from 1 to 3 *last* 7.5 light *stuiver*. One year later private vessels also

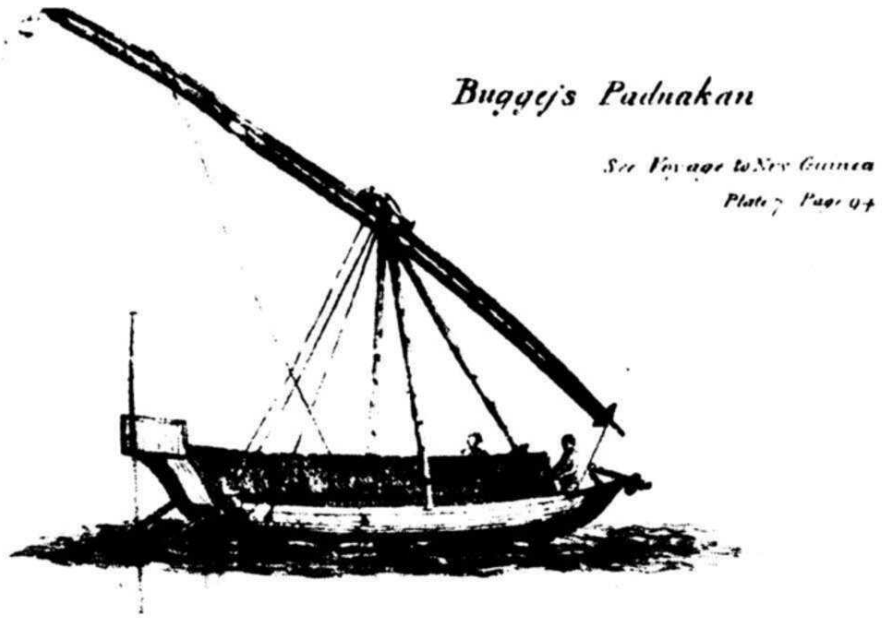
became liable to a 5% sales tax (VOC 2606-2:86-7; VOC 2628:44). Information about prices of vessels is nevertheless hard to come by. In the late 1760s, *chialoup* were sold for about 500 to 1,500 rixdollars, *pencalang* and *gonting* for 100 to 250, and *paduwakang* for 100 or less (VOC 3150:275-7; VOC 3210:98; VOC 3302:115). As there are no data about the age, size and condition of these ships such figures do not say very much.

Recently vessels from South Sulawesi have been the subject of much scholarly attention (Burningham 1987, 1988; Liebner 1993; Pelras 1996), following the pioneering work of Adrian Horridge (1979a, 1979b, 1985, 1986). However, valuable information on the seaborne tradition of Sulawesi can also be obtained from an earlier generation of specialists, mainly writing in Dutch, such as V. van Vuuren (1916) and C. Nooteboom (1932, 1940).

The above-mentioned literature makes it clear that South Sulawesi experienced a constant development in ship types. This evolution finally led, in the second part of the nineteenth century, to the introduction of the *pinisi*, also called *pelari*, a schooner-like ship with western style fore-and-aft rigging. The *pinisi* was in fact the only indigenous vessel sailed by Southeast Asians able to survive in the age of steam and motor-power. Owners of these ships only started to install engines in the last decades of the twentieth century. Until recently, original *pinisi* could still be admired in the old harbours of Jakarta and Surabaya and have generally been considered evidence of the ongoing seafaring tradition of the South Sulawesian populations.

A fore-runner of the proud *pinisi* and *pelari* was the above-mentioned *paduwakang*, the introduction of which took place, according to Horridge (1979b:26, 32), in the early nineteenth century, parallel to the rise of Singapore. However, eighteenth-century authors (Forrest 1792:77) as well as the VOC harbourmasters' registers used for this study, clearly show that the advent of *paduwakang* pre-dated the foundation of Singapore. In fact, the registers indicate that the *paduwakang* was already present at the beginning of the eighteenth century and that it was the most important type of vessel in South Sulawesi by the second part of the century (Table E).

The *paduwakang* is generally portrayed as a ship with one, two or, sometimes three, tripod masts to which traditional tilted rectangular sails were connected. These sails were fastened in such a flexible way to the mast that their performance came very close to fore-and-aft rigging. Because the sail could so easily rotate around the mast, the two lateral rudders connected to the stern were of minor importance for steering the vessel (Liedermoij 1854:362; Horridge 1979b:4, 27). The sails were usually woven from the nerves of Pandanus shrub leaves (Pelras 1996:245), while the hull showed a low bow and a high, strongly projecting stern (Forrest 1792:80; Van Vuuren 1916:108). Some *paduwakang* had decks, others had none at all or only partial ones (Liedermoij 1854:362; Nooteboom 1940:23-5). The combination of a low



Forrest 1792, Appendix I: Buginese *paduwakang* in Maluku

bow and the occasional absence of a deck earned the *paduwakang* the reputation of being a bad sailing ship, difficult to steer against the wind (Forrest 1792:80; De Bruyn Kops 1854:43). G.F. de Bruyn Kops (1854:39) is the only nineteenth-century author who gives sizes: the biggest were 50 to 60 feet long and 13 feet in the beam, the smaller 25 to 30 feet long and 8 feet in the beam. For the early nineteenth century, Dutch authors mention *paduwakang* volumes varying from 15 to 90 *last* (Liedermoij 1854:362) to a much more conservative 7 to 15 *last* (Vosmaer 1839:115-6, 156). Thomas Forrest (1792:80), writing of the second part of the eighteenth century, mentioned a volume of up to 25 *last*.

In contrast to the above-mentioned authors, the harbourmasters' registers of Makassar show a lower average volume of *paduwakang*, namely 6 *last* (Table 2). However, from the 1760s to the 1790s, there was a constant drive pushing this average upward. In the 1760s the average volume was only 4 *last* but by the 1790s it was already 9 (Table F). During the same period, however, the annual recorded maximum size of a *paduwakang*, a few cases excepted, generally remained below the 25 *last* level.

The other frequently mentioned South Sulawesian vessel recorded by the harbourmasters was the *pankor*. Horridge (1986:30) classifies this as a product of the Mandarese tradition of boatbuilding: a double outrigger with one rectangular sail, while Nooteboom (1940:27) called it a dug-out built-up

with planks. Van Vuuren (1916:108-9) thought that the vessel measured just over 1 *last* and had a crew of 3 to 4 persons. In the older literature there is no specific reference to the *pankor*. Consequently, it is hard to say whether the eighteenth-century *pankor* was the same as the twentieth-century double outrigger of Mandar. There is no evidence either way, although the average size of the *pankor* of 2 *last* came quite close to that of Van Vuuren (Table 2). In fact, looking through all the eighteenth-century harbourmasters' registers, it is uncertain whether the label *pankor* was always applied to the same type of vessel.

The *pankor* appears to have been the most common vessel in the first third of the century. After 1734 it seems to have vanished from the waters around Makassar, only to re-appear again, suddenly, temporarily, and in much smaller numbers, in the 1780s (Table E). Given the difference in average number of crew and volume the suggestion that we are dealing here with two different versions seems justified. There are also grounds for thinking, on the basis of crew and size, that the re-emerging *pankor* of the 1780s is just another type of *paduwakang* (Table F). In that case, one could expect to see switches between these two types by individual skippers. However, such changes could not be detected.

From Table E and G it is obvious that the eighteenth century saw a gradual withdrawal of non-Sulawesian types of ship from the port of Makassar. In the 1720s the *chialoup*, the *gonting* and, to a lesser extent, the *pencalang*, still accounted for some 35 to 40% of the ship movements and 75 to 80% of traffic volume. In the last third of the century this was reduced to some 5 to 10% of ship movements and 20 to 25% of volume. The *gonting* vanished altogether and the *chialoup* only survived as a shadow of its earlier self. In the meantime, two other non-Sulawesian types had begun visiting Makassar: the Chinese *wangkang*, measuring circa 170 *last*, and the European style *brigantijn*, of some 80 *last*. After 1780 the *wangkang* was replaced by a bigger junk, of 400 *last*, probably the true *chuan*. In terms of numbers of ship movements these new arrivals were negligible, but from the perspective of volume they had, with about 10 to 20%, a certain significance.

The share of the Sulawesian vessel types, on the other hand, grew continually throughout the century; ship movements climbed from some 60% in the 1720s to about 90% after 1766 and volume from approximately 20 to 70%. Put in somewhat simplified terms, this change in volume levels could be attributed to the replacement of the *chialoup* by the *paduwakang* (Table E, G). A first step in the demise of the non-Sulawesian types might have been the above-mentioned VOC policy of curbing the import of Java-built vessels into Makassar. However, other factors, including economic, were important too, as will be shown later in this chapter, as well as elsewhere in this monograph (see pp. 127-8).

This 'localization' of ship types was not a simple process. In the first third of the century the *pankor* was the dominant type, in the last third the *paduwakang*. If the *pankor* was really the same vessel as the one described by Van Vuuren at the beginning of the twentieth century, namely an enlarged dug-out with outriggers, then the change from *pankor* to *paduwakang* could be explained in mere technological terms. The *paduwakang* was a fully planked boat, which made it possible, in principle at least, to construct larger hulls. That such a factor must have been at work is clearly indicated by the ratio between size and crew (Table 2). For *paduwakang* that ratio was 0.5 *last* per crew member, while the *pankor* only scored 0.2. Considering the ratio between size and crew one might even see the *paduwakang* as a feasible alternative for the *gonting* and the *pencalang* with their ratio of 0.5 and 0.6, respectively. This advantage of the *paduwakang* over the *pankor* suggests an economic reason for the change, namely an increasing demand for carrying capacity in specific sectors of Makassar's trading networks.

It is interesting to note that in the first third of the century the *pankor* was dominant on the southern route, to Nusa Tenggara, the *gonting* and the *chialoup* on Java sailings and the *chialoup* on the Maluku connection. For the *pankor*, substantial numbers sailed to Java as well, specifically to Semarang. After 1766 the picture was totally different. The *chialoup*'s retreat during the last three to four decades of the century was due to economics: the demise of the Makassar – Maluku route. What was left of *chialoup* activity made a last stand on the Makassar – Batavia link, at least until the 1780s. It was the *paduwakang* which won the day, not only by totally replacing the *pankor* on the Nusa Tenggara and the Semarang routes, but also by replacing the *gonting* for Java sailing in general. Finally, after 1780 the *paduwakang* also dominated the voyage to Batavia. In contrast to the *pankor*'s replacement by the *paduwakang*, motivated by an increase in demand for volume, the latter's displacement of the larger *chialoup*, for instance on the Batavia route, might be interpreted as a sign of a diminishing demand for carrying capacity.

The two above-mentioned interlocking developments, namely 'localization' in general and the modernization of the Sulawesian types themselves, also affected the average size of vessels in Makassar's private sector (Table F). In the beginning of the century the average was about 7 *last*. In the 1760s it was less, namely 5 to 6 *last*, to recover quickly to 7 around 1775. Towards the end of the period it was close to 10. Average crew-numbers on board tended to show more stability. Up to the 1780s there was a constant level of about 12 to 13 men, regardless of shifts in types of vessel. Only after 1780 was an increase noted to about 15 men per vessel.

Where were these vessels constructed? Today's main centre of shipbuilding in South Sulawesi is the area of Bira and Bulukumba, where the specialist boat-builders tend to be a distinct ethnic group with their own language and

cultural habits, called Konjo. The infertility of the soil and the availability of suitable timber were important reasons for the concentration of shipbuilding activities in this part of the peninsula (Horridge 1979b:2). During the eighteenth century the timber was already mentioned as a main cause for this economic specialization by the Dutch naval officer Johan Splinter Stavorinus (1797:205). Similar references to this can also be found in a nineteenth-century source (Liedermoij 1854:361-2), which called these people the Lemo-lemo. The Lemo-lemo not only constructed boats in their home area, but also travelled to other areas in the region to offer their services.

By tradition these craftsmen did not use saws to produce their planks or beams, nor did they use iron nails to fit the different parts of the boat together. Instead, they used wooden dowels (Liedermoij 1854:362; Horridge 1979b:12-5). An eighteenth-century author, Thomas Forrest (1792:80), reminds us of the different methods of constructing the hull in Europe and Southeast Asia. After laying the keel, the Sulawesians set up the shell of planks first and fitted in the frame of ribs afterwards. As Forrest puts it: 'In Europe we build the other way around; we set up the timbers first, and fit the planks to them afterwards.'

Without doubt the indigenous boat-builders in South Sulawesi must have been the creators of both the *pankor* and the *paduwakang*. However, it is unlikely that they were also building non-indigenous types, such as the *chialoup* and the *gonting*. It is known that around 1600 most of the bigger ships operating in South Sulawesi were imported from Java or from Southeast Kalimantan, notably from the area of Pegatan (Pelras 1996:256). Late seventeenth and early eighteenth-century VOC sources make it clear that the inhabitants of South Sulawesi, particularly those of Makassar, obtained what foreign types of vessel they possessed from Central and East Java, sometimes by way of Batavia. When the Fort Rotterdam authorities were asked by the High Government in Batavia whether the craftsmen on the south coast of Sulawesi could make a *pencalang* for the VOC, they replied that those craftsmen were mere 'bunglers', only capable of making small craft. If they had to make a middle-sized vessel they needed 7 to 8 months and that was far too long to make their products an alternative to the teak ships from Java (VOC 1623:222-3; VOC 1853:25; VOC 1882:10). In the eighteenth century Kalimantan was no longer mentioned as a source for ships. As far as size as well as ratio between size and crew was concerned, the *pankor* was no match for the imported vessels. However, as the statistics indicate, once the indigenous boat-builders were capable of building a technically more advanced type, such as the *paduwakang*, the situation changed dramatically. Built nearer at home and hence probably much cheaper, the *paduwakang* drove the foreign types from the Sulawesian seas.

Finally, a few words about the VOC's own ships which called in at

Makassar, usually only a handfull. Roughly one-third of the ships of these were European-built. The European-built vessels were essentially the three-masted square-stern *spiegelschepen* or East Indiamen, which tended to become bigger and bigger as the eighteenth century progressed. In the first decades of the century they were some 145 to 150 feet long, with a volume of between 300 and 400 *last*, while in the last they had already reached a length of more than 160 feet and a volume of at least 500 *last* (Bruijn et al. 1987:43). The odd East Indiaman which appeared in Makassar each year was usually an old one, no longer used on the long voyage between Asia and Europe. Most of these vessels were laid up in Batavia a few years later. From the perspective of the VOC's own business, this reflected the relative unimportance of Makassar as a trading port. The availability of big East Indiamen became a real problem to the VOC at the time of the Fourth Anglo-Dutch War of 1780-1784, which cut off sailings to and from Europe. As a result, towards the end of the century the VOC was only able to serve Makassar with smaller vessels, of between 200 and 400 *last*.

The Asian-built VOC vessels, which were usually stationed in Makassar itself and were responsible for about two-thirds of the number of the Company's ship movements there, originated from the VOC shipyards in Java. In the beginning of the century these were both *chialoup* and *pencalang*. Such ships in VOC service were usually bigger than those in the private sector. The *chialoup*, which were between 60 and 75 feet long and had a volume of between 40 and 80 *last*, gradually disappeared in the last part of the century, to be replaced solely by the *pencalang*. In the beginning of the century *pencalang* were some 55 to 60 feet long with a volume of 20 to 35 *last*, later on they became between 60 and 75 feet long with volumes of some 60 to 80 *last*.

The weapons

Information on armament in the harbourmasters' registers is limited to the years from 1766 onwards; unfortunately there is no information on the first half of the century. For the blocks 1766-1769 and 1774-1777 information is almost exclusively on outgoing vessels, while for 1786-1789 weapons on both incoming and outgoing vessels are listed. In the late 1760s about 95% of all departing vessels were listed as carrying arms. In the mid-1770s the score was almost 100%. Adding data on vessels arriving did not dilute the rather high degree of registration, because in the late 1780s the number of vessels carrying armament was still 96%.

Most of the weapons on board were firearms. Where these weapons came from is an interesting question. Some eighteenth-century authors state that the Sulawesians were able to produce their own; François Valentijn (1726:136)

said they produced artillery and handguns, such as snaphaunces, as well as gunpowder. Later, Thomas Forrest (1792:81) confirmed the Buginese ability to make firearms, including small bronze pieces, called *rentaka*, which were up to some six feet long and shot about 0.5 pound. In spite of this ability most *rentaka* were imported from Kalimantan. Forrest also made the point that the Buginese were not able to manufacture gunlocks. If he was correct, it would mean that the Sulawesians, contrary to the claim of Valentijn, only assembled snaphaunces. Considering the absence of evidence on arms manufacture in South Sulawesi proper in eighteenth-century Dutch sources and Forrest's remarks, it is highly probable that most weapons on board ships calling in at Makassar were imported. Possibly they were bought from indigenous producers in other areas of Southeast Asia, such as Kalimantan. On the other hand, there must also have been a considerable degree of buying from European suppliers (Knaap 1996:43, 80).

The most frequently occurring artillery on board the vessels in Makassar's private sector were cannon, swivel guns and *rentaka*. Unlike cannon, swivel guns did not stand on gun carriages, but were fixed to the ships' rail. It is not known if the cannon or swivel guns involved were cast in iron or in bronze, but *rentaka* were bronze. The calibre of the artillery is also unknown, but it might be assumed that it was about 1.0, 0.5 and 0.25 pounds for cannon, *rentaka* and swivel guns, respectively. The most frequently occurring handguns were blunderbusses and snaphaunces. Both were flintlocks. The first was slightly heavier than the second, owing to its funnel-shaped barrel. Blunderbusses were meant to fire pyrotechnic devices as well as grapeshot, whereas snaphaunces only shot bullets (Knaap 1996:40-1). Almost no prices of specific weapons for Makassar were found in the sources, but the VOC official Jacob Bickes Bakker, in his private accounts, recorded that he bought snaphaunces for 8 and blunderbusses for 11 rixdollars each in 1761 and a bronze 'small piece' shooting 0.5 pound in 1769 for 35 rixdollars (Koopmansboeken 16:8-3-1761, 31-12-1769). The snaphaunces and blunderbusses were about the same price as those on Java in the 1770s. Compared to Java, however, the 'small piece' was rather cheap (Knaap 1996:79-80).

Considering the fact that during the years 1766-1769 the *chialoup*, *gonting* and *pencalang* were not yet totally replaced by the *paduwakang*, it is possible to make a comparison of armament according to ship type (Table H). Looking at the average volume of gunpowder on board, the conclusion can be drawn that the *chialoup*, with more than 80 pounds, was the most heavily armed vessel. This conclusion is confirmed by the fact that a relatively large number of *chialoup* carried cannon and many snaphaunces. In absolute numbers the *chialoup* had even more cannon on board than the three other types combined, namely 185 as against 168. The second best armed was the *pencalang* with almost 65 pounds of gunpowder and a relatively high occurrence of cannon

and snaphaunces. The *gonting* carried a little over 50 pounds gunpowder. However, the *gonting* was badly provided with artillery. Most of its skippers relied on blunderbusses and snaphaunces only.

In view of the fact that the average amount of gunpowder was rather low on *paduwakang*, namely less than 30 pounds, they were clearly the most lightly armed of the four types of ship (Table H). However, the relatively low number of *paduwakang* for which data on gunpowder are available, might be an indication that gunpowder was under-registered for these vessels. The dominant firearms on *paduwakang* were blunderbusses and snaphaunces. It should be stressed here that, although in absolute terms the *paduwakang* outnumbered the other types as far as these weapons were concerned, in average numbers it clearly lagged behind. The *paduwakang* averaged 2 to 3.5 of each of these guns, while the other three had 3 to 8 pieces. For artillery, the average per type of weapon varied between 2 and 4 on the *paduwakang* and between 4 and 7.5 on the other vessels.

Another interesting point is the distribution of *rentaka*. It seems that this Southeast Asian weapon was relatively popular on the indigenous *paduwakang*, just as European-style artillery, such as the cannon and, to a lesser extent, the swivel gun, were found more on non-Sulawesian types of vessel. It also has to be borne in mind that in this period both the *chialoup* and the *pencalang* were common on the Java route, specifically Batavia, so there is not only a correlation between the origin of the type of vessel and of weapon technology, but also between the sort of weapon and the routes sailed.

The armament on board ships tended to grow over time. In the late 1760s all ships for which arms data are available showed on average 2.63 different weapons per vessel. In the mid-1770s this had grown to 2.73 and in the late 1780s it was as much as 3.65. Further evidence of increasing armament is given in Table I, showing weaponry on board the most frequently occurring ship type, the *paduwakang*. The average quantity of gunpowder increased from approximately 28 pounds in the 1760s to approximately 37 pounds in the 1770s and 1780s. Table I also reveals increases in the absolute numbers of firearms, in particular between the mid-1770s and the late 1780s. However, these do not mean very much because, as mentioned earlier, in the 1760s and 1770s the registration of armament was limited to outgoing vessels, whereas in the 1780s both incoming and the outgoing traffic was registered. Consequently, the comparison of the percent of *paduwakang* carrying a certain sort of weapon and the subsequent averages of these sorts per vessel produces a far better picture of the general development of armament than the absolute numbers as such.

Looking at the average numbers of arms per *paduwakang* for the three most important sorts of weapon, namely *rentaka*, blunderbusses and snaphaunces, a constant increase can be noted (Table I). The snaphaunce saw the greatest

increase: in rounded-off averages from 3 to 4 to 5 pieces for the 1760s, 1770s and 1780s, respectively. Most remarkable, however, were the percentages of *paduwakang* carrying different sorts of firearms. Between the 1760s and the 1770s considerable growth occurred in the categories *rentaka* and blunderbusses, from 45 to 52% and from 58 to 66%, respectively. Between the 1770s and the 1780s the percentage of vessels carrying cannon, swivel guns, blunderbusses and snaphaunces increased. The presence of blunderbusses rose from 66 to 76% and that of snaphaunces from 82 to 91%. Only the *rentaka* seemed to lag behind the general trend between the 1770s and 1780s, but if we might consider the label 'small pieces' as interchangeable with *rentaka* then even the latter's development fits in the general pattern.

How should this increase in armament during the latter part of the eighteenth century be explained? There are four factors that might be at work here. First, a more accurate registration on the part of the VOC; this possibility is reinforced by the fact that in the 1780s incoming vessels also had their arms registered. Second, the general growth in volume of individual *paduwakang*, from 4 to 7 *last* on average (Table F). The bigger the vessel, the more weapons were deemed necessary. Third, mounting insecurity at sea, for instance through pirates. In this respect it is important to note increasing slave raiding by the Sulu sultanate and its allies from the early 1770s onwards (Warren 1981:24, 147). Fourth and finally, apart from better registration and increased demand, the supply of arms should also be taken into account. After the mid-1760s guns became more abundant because of the growing influx of English country-traders from India into Southeast Asia, which gathered extra momentum when, at the Peace of Paris of 1784, the Dutch were obliged to open several of their ports to the English (Vlekke 1965:234).

The skippers

The skippers were the most important men in Makassar's shipping and trade, and since their names are given in the harbourmasters' lists, it is possible to follow their voyages. The Sulawesians called commanders of ships *anakoda* or *punggawa*, the latter usually used more broadly, denoting leadership afloat and ashore, and also referring to non-skipper owners of vessels (Ammarell 1994:303). The position and necessary qualities of *anakoda* are described extensively in the well-known maritime law-code of Makassar's Wajorese community. This code is ascribed to the local Wajorese leader, Amanna Gappa, who has recently been identified as belonging to the early eighteenth century (Noorduyn 2000:101). According to this code, an *anakoda* should keep his vessel in good condition, should possess arms and trading capital, be careful in navigation, keep a close eye on his subordinates, be

fair and patient with them, and be able to speak well for them in public, if trouble arose abroad (Matthes 1869:51-2). Obviously, he must also be able to find his way over wide seas and be economically credible in the eyes of the people who entrusted commodities to him on particular trading voyages. Once on board, he was responsible for discipline; in this respect Amanna Gappa compares him with a 'king'. Pelras recently compared the relationship between skipper and sailors on board to that between a father and his children (Matthes 1869:58-9; Pelras 2000:47).

Makassar's harbourmasters' registers record thousands of skippers' names, but it is not easy to say to how many individuals these different names might apply over the century. That would take a careful, and hence very time consuming, screening, taking into account circumstantial evidence such as ethnicity, type of ship, direction of movement and so on. One obvious complication is the inaccurate spelling of names by VOC officials. This is no surprise, as they noted down names as they heard them. Moreover, they did not speak most of the skippers' languages. Consequently, slightly different names might apply to one and the same person, for example Behiapko and Bihiapko, Hoeasaning and Hoea Saming, Mamantoele and Mamoentoely, etcetera, etcetera.

Counting skippers' names revealed that during the year 1733-1734 there were about 1.5 as many ship movements as there were individual names, though inevitably further checking showed that not every individual name represented a single real person. The upshot of this was that the ratio between real skippers and ship movements should be estimated at 1 to almost 2. However, if the counting was carried out in a time-span longer than one year, different ratios between number of ship movements and real skippers were the result. For instance, for the three-year block 1786-1789 it was established that the ratio between skippers and moves was 1 to a little over 2. Within the only four-year block in this research, namely 1722-1726, the ratio was 1 to 3. Taking a one-year period as standard and allowing for some under-registration, a ratio of 1 to 2 between skippers and moves should approximate the truth.

Over the entire eighteenth century the annual average number of ship movements in the private sector was 508.4 (Table A), so probably the actual number of skippers involved would be around 250. For the VOC's traffic it is much easier to establish the annual number of skippers. Throughout the period under review there were only 60 different ships involved, each making about 3 moves on average. On an annual basis, one might say that typically some 4 VOC skippers appeared in Makassar's harbour.

Having established the general number of skippers active in the roadstead and concentrating further on private skippers, who formed the great majority, the question arises whether they lived permanently in Makassar or not. Unfortunately, there is little information about this in the registers. There is

only one year, namely 1733-1734, in which a consistent listing of residence occurred, which can be summarized as follows:

Table 3. Places of residence of skippers, as mentioned in private sector ship movements, in 1733-1734

	Number	Percent
Makassar	251	61.4
Other ports Sulawesi	95	23.2
Other ports, outside of Sulawesi	15	3.7
Port not listed	48	11.7
Total	409	100.0

Assuming that those with no listed residence included a few from Makassar, we can conclude that about two-thirds of all skippers were from Makassar itself. Among the other Sulawesi ports of residence the most important were Galesong with 40 citations, Maros with 15, Gowa with 12 and Cenrana Bone with 10. In the case of Galesong, it must be remembered that this was not only the name of a dependency of the VOC, located some 25 to 35 kilometres south of Makassar, but also of a *kampung* in Makassar itself, about one kilometre south of Fort Rotterdam. Outside Sulawesi the most important residence in the sample was Batavia with 7 mentions.

Of the sample of skippers living in Makassar, 198 out of a total of 251 ship movements were classified according to ethnic and/or civil status. The most frequent labels were Wajorese with 61, Malay with 41, Company's Subject with 39, Burgher with 20, Chinese with 19 and Chinese Peranakan with 6. Within a range of about one kilometre from Fort Rotterdam there were specific Wajorese and Malay *kampung*, while the Burghers and the Chinese probably lived in Vlaardingen and Kampung Baru, the settlements which were nearest to the Fort. The label Company's Subjects mainly applied to Sulawesian names. It probably concerned people who had come from the VOC's Northern or Southern Districts to settle in one of the town's *kampung*.

Ethnic and/or status labelling of skippers by the officials of the VOC was generally more consistently provided than were places of residence; see Tables J and K. However, in some of the sixteen years under discussion, for instance the years from 1723 until 1726, the number of ethnic/status blanks or unlabelled ship movements proved quite high. Looking at the names of these unidentified skippers, we can conclude that all were Southeast Asian, Sulawesians included, though there were also a few cases of people of mixed descent, for example Chinese-Southeast Asians or Indian-Southeast Asians. The offspring of liaisons between European men and Southeast Asian women, the so-called Mestizos, never appeared in the unlabelled group if they were

recognized by their fathers and hence baptized. They were already included in the category Burghers.

The labels shown in Tables J and K can be classified under four different broad headings: ethnic Makassarese, other Sulawesians, other Asians and Europeans. The label Makassarese, used here in the strictest possible sense of the word, as well as Galesonger and Marosser, apply to Makassarese-speaking peoples. The Galesongers and the Marossers belonged to the VOC's Southern and Northern Districts, respectively, although as mentioned previously, 'Galesongers' could refer either to those who were still living in their original district or to those living in Kampung Galesong. The fact that most Galesongers were only outgoing rather than incoming, suggests that they were mainly from the district, not the town. Apparently, they entered Makassar without any document just to obtain a pass and, probably, a cargo. On their return from overseas, usually from the other side of the Flores Sea, they did not call at Makassar. Strictly speaking, Makassarese were inhabitants of the kingdom of Makassar, the principalities of Gowa and Talo. The Makassarese in the harbourmasters' registrations might be subjects of Gowa and Talo and/or *kampung*-dwellers from near the Fort, who, in one way or another had become subjects of the VOC.

Other Sulawesi labels were Buginese, Mandarese and Wajorese; we should also add a few Butonese, who were actually subsumed in the category 'Other'. Linguistically speaking the Buginese, Mandarese and Butonese were separate entities, while the Wajorese were a sub-entity of the Buginese. In cases of individual skippers, it sometimes happened that on one voyage they were classified as Wajorese and on another as Buginese. Especially in the beginning of the century the dividing line was often unclear. However, it is also possible that 'Buginese' was used in a much stricter sense by VOC officials, to designate people from the most prominent Bugis-speaking principality, Bone. This probably happened later on in the century. In the case of the Buginese and the Wajorese mentioned in the harbourmasters' registers, they most probably lived in the *kampung* around the Fort. On the basis of their names, the Company's Subjects might well be categorized as Makassar-speaking or Bugis-speaking Sulawesians, living under the jurisdiction of the VOC.

The 'Other Asians' included the categories Malays, Chinese, the mixed-origin Chinese Peranakan and Moor Peranakan. There were also a few Endenese, Bimanese, Javanese, Ternatans and Moor skippers, who have also been put into the category 'Other'. The Malays originated from the western part of the Archipelago, but had a long tradition of living and trading in South Sulawesi. Most lived in Kampung Melayu to the north of the Fort, while Chinese tended to live in Vlaardingen and Kampung Baru. The Chinese Peranakan were the children of Chinese-Southeast Asian liaisons and were often Muslim. Moors were actually Indian Muslims, while Moor

Peranakan were born of marriages between Moors and Southeast Asians. The Europeans among the skippers were Christian Burghers. Originally ex-Company personnel, who had stayed on in the Indies, their often Mestizo offspring were also counted as Burghers. Occasionally the harbourmasters mention 'Indigenous Burghers', which might apply either to Mestizos or Christian Asians. The Indigenous Burghers were also put in the category 'Other'.

Table 4. Private sector ship movements and volume of shipping according to the principal ethnic and status labels, in percent (rounded-off)

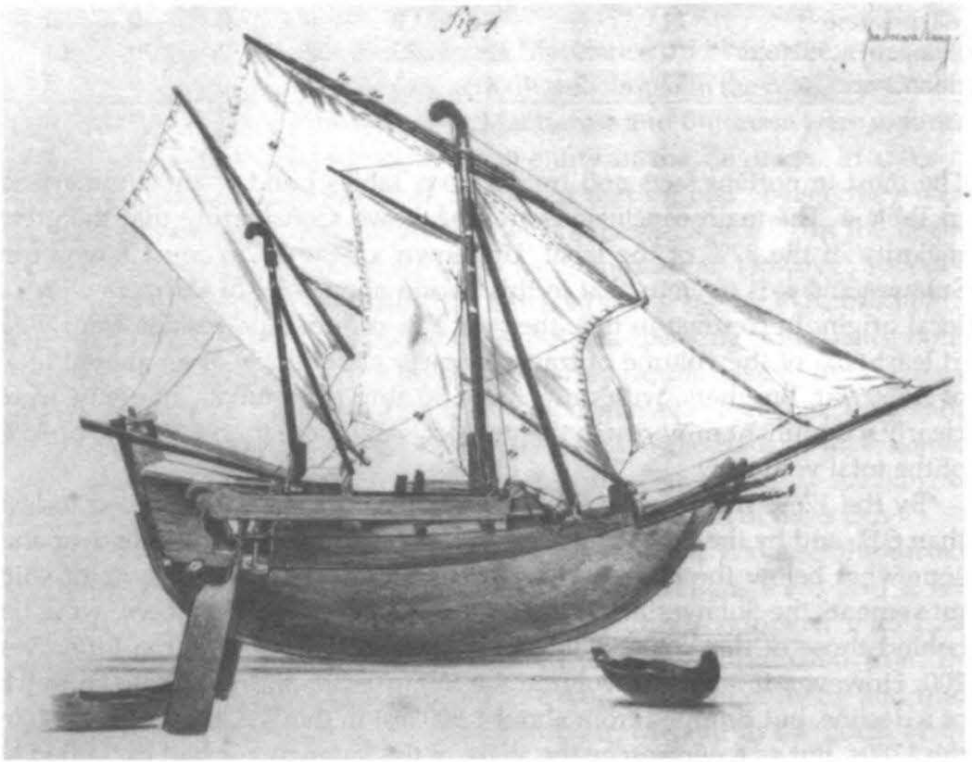
	1722-1726		1766-1769		1774-1777		1786-1789	
	mov.	vol.	mov.	vol.	mov.	vol.	mov.	vol.
Burgher	10	35	4	13	8	18	3	3
Chinese	6	22	18	30	26	39	31	46
Chinese Peranakan	1	1	10	10	6	4	10	8
Malay	5	2	10	11	12	10	19	15
Buginese	9	4	4	3	9	6	3	2
Wajorese	13	8	0	0	1	1	1	1
Galesongers	1	0	8	4	11	6	7	5
Makassarese	14	5	0	0	0	0	0	0
Company's Subjects	0	0	42	25	22	12	20	13
Unknown	37	17	4	3	1	0	5	5

The most important facts and trends from Tables J and K are summarized in Table 4. The main conclusions are as follows. Considering that the great majority of the 37% of the label 'Unknown' of the 1720s must have been Sulawesians, it is obvious that in this period about 75% of skippers were of local origin. In contrast to this, the odd 25% of non-Sulawesians controlled at least 60% of the volume of traffic, namely about 2,250 of an annual total of 3,750 *last*. Burghers, with only about 50 ship movements annually, were clearly a dominant minority in this respect, with more than 1,300 *last* or 35% of the total volume.

By the 1760s the share of Sulawesians, by number, had declined to less than 60% and by the 1770s and 1780s it had fallen further to a little over and somewhat below the 40% level, respectively. In absolute numbers of ship movements the Sulawesians of the 1780s, including the Unknown, were far behind those of the 1720s, falling back from an annual 400 to a little over 200. However, in absolute volume the Sulawesians did not show so much of a decline, but dropped from about 1,500 *last* in the 1720s to about 1,400 in the 1780s. But as a percentage the share of the Sulawesians had dwindled to less than 30% of volume. In terms of ship movements the non-Sulawesians passed the 50% level in the 1770s, while in the 1780s, with an annual total of

over 375, they accounted for more than 60%. Measured in volume they even crossed the 70% line in the 1770s. In the 1780s their annual average total of *last* amounted to more than 4,000. This compared very favourably to the 2,250 *last* of the 1720s. Among the non-Sulawesians, the Burghers were clearly losing ground, receiving a final blow after the Fourth Anglo-Dutch War. The Chinese, on the other hand, appeared as the most prominent group of skippers, followed at some distance by the Malays. In the 1780s the Chinese, with about 180 moves or just over 30%, controlled more than 2,500 *last*, which was not far below the 50% level.

Looking at average volumes per ship movement, a rather wide gap was clear in the beginning of the century, with Chinese and Burgher ships averaging 28 and 26 *last* respectively, while Sulawesians, with the exception of the Wajorese, were sailing vessels of some 3 *last*. The Chinese and Burghers mainly captained non-Sulawesian ship types, such as *chialoup* and *gonting*, while the Sulawesians made do with the indigenous *pankor*. The average ship volume among Wajorese skippers was 5 *last*. By the 1760s and 1770s things were very different. The Burghers with vessels of 18 to 19 *last* on aver-



Atlas 1885, plaat 16, figuur 1: model of a *paduwakang*

age still seemed to prefer non-Sulawesian vessels, while the Chinese with 10 to 11 were more inclined to move on to the new indigenous *paduwakang*. During these decades the Malays sailed vessels of 6 to 7 *last* on average, while Sulawesian ethnicities, of which the Company's Subjects were the most important, managed with 3 to 4. After 1780 the remaining Burghers also switched entirely to Sulawesian ship types. At the same time the dominant Chinese saw their average ship-size grow to 14 *last* and the Company's Subjects to 6 *last*, which was almost as much as the Malays, with 7. One of the striking features of the 1780s was the levelling-off of differences in the average volumes between the groups, which was closely linked to the 'localization' of ship types mentioned previously.

Analysing the volume of shipping according to route and ethnicity produced the following picture. In the 1720s, Burgher skippers were very dominant on the voyages to Java and Maluku, claiming volume shares of about one-third and almost one-half, respectively. The Chinese were also strong on the Maluku route with about one-third. Although Sulawesians sailed in many directions, their share of volume was only important in the Nusa Tenggara and Java traffic. In the final third of the century, the Burghers' last stronghold, at least until 1780, appeared to be the Java connection. The Chinese share in this route had also become quite considerable, but towards the end of the century they were strongest in the Nusa Tenggara and China trade, controlling more than one-third of the former and, in the case of the latter, everything. The Sulawesians retreated from Java and concentrated on the South, particularly Nusa Tenggara, where their share was more or less equal to that of the Chinese. Nusa Tenggara also became the Malay skippers' mainstay.

Summarizing these developments, the following trends are clear: the marginalizing of the Burghers, the growth of Chinese activity and the decreasing share of the Sulawesian skippers. The gradual decline of the Burghers was certainly linked to changes in routes, a process that will be discussed later in this chapter. The Chinese profited most from these shifts. The first question that must be asked concerning the deterioration of the Sulawesian part in commerce, is whether this was a general regional trend or whether it was confined to the port of Makassar. It might very well be that the Sulawesians of the last third of the eighteenth century were still active in trade and shipping, but simply evaded the control of the VOC. There are indications of such an evasion, although the scale is hard to establish (see pp. 27-9). If the level of this evasion was less than the decline of the Makassar Sulawesians, then the conclusion must inevitably be that Sulawesians in general had been losing ground to the Chinese.

The crew

The yearly registered crew totals for both private sector and VOC are shown in Table L, while summaries for three-year and four-year blocks are given below. The trends revealed broadly coincide with those for numbers of ship movements and volume, which will be discussed later on.

Table 5. Average annual number of crew sailing on private sector and VOC vessels

	Private	VOC	Total
1722-1726	6,425	302	6,727
1766-1769	6,985	505	7,490
1774-1777	5,770	555	6,325
1786-1789	8,348	309	8,657

Over the entire century, the minimum year for the private sector was 1776-1777 with 4,908, while the maximum was 1788-1789 with 9,025. The annual average was 6,650. The VOC sector displayed far lower totals, the annual average being only 413. Considering that each year every ship was registered twice, the actual number of crew members in the private sector should be estimated at a little over 3,300 and in the VOC a little over 200. Of this VOC 200 less than 50 were permanently stationed in Makassar as part of the local garrison. The rest were sailors from the few big ships passing by. Taking into account what has been said earlier about skippers' residence, it might be assumed that about two-thirds, or 2,000 out of a total 3,300 private sector sailors, lived in Makassar or its immediate neighbourhood.

Information on the ethnic background of crews is scarcely available in the harbourmasters' records. It appears that most of the skippers had crews from their own home regions, so a skipper from Semarang often had Javanese hands, while a skipper from Makassar had Makassarese or Buginese men on board. However, Chinese and Burgher skippers were at times accompanied by only a few fellow countrymen. Burghers might employ one or two other Christians, such as Mardijkers, that is Christians of Asian origin. Consequently, the more a skipper belonged to a non-Southeast Asian minority, the more chance there was that he had to recruit among other ethnicities. How this could work is seen on board a Chinese owned *chialoup* which was shipwrecked to the south of Makassar in 1727. When the vessel sank, 20 out of the 37 persons on board, including the Chinese skipper, drowned. Among the 17 members of the crew who managed to survive were 2 Moors, 2 Mardijkers, 1 Portuguese from Macao, 5 Javanese and 7 Buginese (VOC 2072:118-23). Another example is the *chialoup* owned by the VOC official

Jacob Bickes Bakker, whose private account-book for the period 1757-1770 has survived. His ship departed for Batavia in 1769 with 23 men on board, three of whom, including the skipper, the boatswain and, probably, the first mate, were Burghers, while another 20 had either Sulawesian or typical slave-names, examples of the latter being April, November and Tobias (Koopmansboeken 16:31-12-1769). On a few occasions there is also information about positions on board, with mentions of first and second mates, scribes, boatswains, cooks and ordinary seamen. As might be expected, among the last slaves might be included. The few cooks mentioned were usually women.

The early eighteenth-century law-code of Amanna Gappa provides rather detailed information about people on board. A few had an on-going relationship with the *anakoda*, for instance the first and the second mate, the *jurumudi* and the *jurubatu*. The *jurumudi* was in charge of the rudder(s) on the stern, while the *jurubatu* was a sort of pilot in the bow (Matthes 1869:49). The ordinary sailors on board, usually called *sawi*, were divided into three categories: those who had a permanent relationship to the *anakoda*, usually his slaves or debt-bondsmen, those who only occasionally sailed with him, and finally, the passenger-sailor. All were liable to work on board but in varying degrees, the first carrying the heaviest load and the third only doing something in cases of utmost emergency. The second and the third category, as well as the *manumpang*, the passenger in the proper sense of the word, paid a fee to the *anakoda* for him or herself and/or the commodities they carried. Once the ship entered a port most *sawi* engaged in trade. The *sawi* under permanent control of the *anakoda* usually did so with his commodities, which were given to them on commission (Matthes 1869:70-3).

An idea, albeit somewhat confusing from our point of view, about the situation on board can be obtained from the accounts of the Batavia round-trip by Jacob Bickes Bakker's *chialoup* in 1769. On the outgoing journey no payment was noted for the skipper, Barend Jansz. However, the man who was probably the first mate received 10 rixdollars for wages per month, while the boatswain received 7.5. One group of 10 persons were paid about 4.5 each a month, while another 10 only earned some 3.5 rixdollars. Some of the crew received wages for 2 months, others for 4. This might be an indication that some men were not contracted for the return-voyage. On the homeward-bound journey, the skipper, Barend Jansz, was given 0.25 rixdollar per day as a subsistence allowance. The boatswain, on the other hand, now obtained 6.25 rixdollars per month for both wage and allowance, while a new first-mate, who mustered in Batavia, got 12.5 rixdollars per month. Two other men, who also had come on board in Batavia, had to be paid 7.25 rixdollars. The remaining 17 men on the return voyage to Makassar seem to have received about 2 rixdollars for allowance only (Koopmansboeken

16:31-12-1769). So clearly the payment for crew could greatly vary according to status on board. Moreover, seafarers seem to have been more expensive in Batavia than in Makassar.

The owners

The ownership of vessels is only intermittently recorded in the harbourmasters' registers, mainly for the first part of the century. In the last third, registration of ownership is rare, being noted in only 3% of the ship movements. Obviously, the harbourmasters and their clerks of the last part of the century were less interested in ownership than their colleagues some fifty years earlier, who recorded it at an annual average rate of 18%. In the cases for which no separate owners are mentioned, it could be that the skippers were also the owners. Once more, there is a marked difference in the sources between the first and the last third of the century. In the former the formula is 'skipper so-and-so sailing his vessel', while after 1766 the wording is neutral: 'skipper so-and-so sailing a vessel'. Consequently, the earlier sources seem to present far better insight into ownership than the later.

Concentrating on the beginning of the century, the conclusion might be that about 80% of skippers owned the vessel they sailed. This compares a little unfavourably to the situation in Java around 1775, in particular with those in the Palembang trade, with about 85% skipper-owners (Knaap 1996:75). On the other hand, it should be noted that 1717-1718, the first year registered, showed the lowest score of skipper-owners, about 70%, while afterwards it seems to have grown to over 85% by 1733-1734. However, this last year was far from representative, being a bad year for Makassar's trade, owing to political turmoil. As a result of this Wajorese non-skipper-owners were conspicuously absent in the records.

Turning to non-skipper-owners, namely owners who did not sail their own ships, about one-third came from VOC-ruled areas other than Makassar, such as Ambon, Banda or Batavia. Of the Makassar-based rest the most numerous ethnicities among non-skipper-owners in the early eighteenth century were the Burghers with 99 entries, the Wajorese with 90 and the Malays with 60. It appears, moreover, that these owners strongly preferred engaging skippers of their own ethnicity. About 90% of Wajorese owners chose Wajorese skippers, while the rate of selection of fellow-countrymen among Malay owners was almost 78% and among Burghers 63%. The most popular non-Burgher skippers among Burgher owners appear to have been Malays.

For the first part of the century a clearer picture of ownership can be obtained from the lists of foreign types of vessel, namely *chialoup*, *gonting* and *pencalang*, with home-port Makassar. This registration started in 1714, at the

same time as the harbourmasters' registers (VOC 1853:25, 92); the first still available dates from 1715 (VOC 1882:2-6). To get an idea of the distribution according to status or ethnicity labels the lists of 1717 and 1723 (VOC 1894:77-80; VOC 1995:94-9) have been summarized in Table 6. One has to remember that among the first four mentioned groups there are many of mixed descent. The few vessels registered as belonging to the rivers of Talo, Sanrabone and Gowa are excluded from the table.

Table 6. Ownership of private sector *chialoup*, *gonting* and *pencalang* in Makassar

	1717		1723	
	Vessels	Volume (*last*)	Vessels	Volume (*last*)
Burgher	13	272	18	332
Chinese	25	227	24	264
Malay	27	199	22	168
Moor	11	58	13	113
Buginese	10	60	9	40
Wajorese	24	118	26	144
Total	110	934	112	1061

Wajorese, Chinese and Malays were the most numerous owners. However, in terms of volume the Wajorese proved less important, the sequence then being Burgher, Chinese, Malay. The share of Burgher and Chinese ownership, roughly one-third and one-quarter respectively, corresponds rather well with their percentages in shipping activity as given in Table 4. There was almost no concentration of ownership of vessels. In 1717 there were only 14 persons who possessed 2 ships: 4 Chinese, 4 Malay, 4 Wajorese, 1 Burgher and 1 Buginese. In 1723 10 people had 2 vessels: 4 Chinese, 2 Malay, 2 Wajorese, 1 Moor Mardijker and 1 Buginese.

In 1723, the man owning the most volume was a Moor Mardijker: Daeng Maladja, with 2 vessels and a total volume of 53 *last*. One of these, a *gonting*, had been bought in 1721 at an auction of the belongings of the late Captain of the Burghers, Andries Raadman. Daeng Maladja himself was a typical example of how complex ethnic labelling could be. In the ownership registration he was classified under the strange label of Moor Mardijker. The title Daeng, however, suggests an indigenous Sulawesian connection, a possibility which was further enhanced by the fact that the harbourmasters often classified him in the registration of traffic as 'free Makassarese' (VOC 1979:95). The second-most important ship-owner in Makassar was Thomas Carper, the then Captain of the Burghers. He only had 1 vessel, a *chialoup* of 43 *last*, in which he himself sailed quite frequently (see p. 157). The third major ship-owner,

the Chinese Lijanko, possessed 2 vessels with a total volume of 36 *last*.

Amanna Gappa's law-code contains some detail about the relations between non-skipper-owners and the *anakoda* to whom their vessels were entrusted. If the latter brought in his own first and second mates, income from freight was simply split fifty-fifty, but if the mates were the owner's people, then he received two-thirds and the *anakoda* one-third (Matthes 1869:49). From this section in the law-code, one gets the impression that situations in which the non-skipper-owner was also the full possessor of the entire cargo were rare. Cargo ownership was something in which a whole range of persons might be involved, ranging from the humble *sawi* on board to a rich capitalist staying at home.

The law-code also provided freight-rates, which varied according to distance and whether or not a commodity took up a lot of space on board. The rates mentioned were between 2.5 and 10% of the estimated value of the products concerned. For slave freight there was a different tariff, not based on value but reckoned per male or female head, which varied once more according to distance. As the law-code gave the rates for slaves in *guldens* and not in *realen* or *rijksdaalders* (see p. 87), the suspicion arises that here we have nineteenth-century adaptations to Amanna Gappa's original text (Matthes 1869:44-8, 68-70).

Bakker's accounts give us some information on the commercial activities of this one ship-owner. In 1753 Jacob Bickes Bakker came out to Asia for the VOC Chamber of Enkhuizen as a *ziekentrooster*, or sick-visitor, a junior position in the Protestant ecclesiastical hierarchy. Once in Asia he moved from the ecclesiastical to the civil service of the VOC. From 1756 to 1761 he worked as assistant and bookkeeper in Makassar for the Board of Justice and as general secretary of the government in Fort Rotterdam. Through marriage he became related to the Hodenpijl family, a well-established Makassar family of both VOC personnel and Burghers (VOC 3432:37; VOC 5204-2:443; VOC 5209-2:174). From 1761 to 1764 he was Resident of Selayar and then, after a short stay in Makassar, from 1764 to 1768 of Bima. In 1768 he seems to have left the service of the VOC with the rank of junior-merchant, after which he disappears from the sources. From about 1757 Bakker traded on his own account, including in slaves, in this he acted as an intermediary between, for example, the court of Bima and the VOC in Batavia. In order to further his interests he worked with partners in both Makassar and Batavia. These partners were, like he himself, usually still in the service of the VOC or just retired (VOC 799:177-8; VOC 3432:37, 54; VOC 11885:28).

In 1768 Jacob Bickes Bakker seems to have bought the *chialoup De Hoop*, which was sailed by the very experienced Makassar Burgher skipper Barend Jansz. However, the harbourmaster's register does not give Jacob Bickes Bakker himself as owner but the 'youth' Jacob Philippus Bakker, who must

have been a son. The ship had a volume of 25 *last* and a crew of between 25 and 36 men. Given volume and crew number, it seems that Barend Jansz had already been sailing this vessel in the previous year, when it was owned by one Intje Tiekoe. From the private accounts, it becomes clear that Barend Jansz organized much of the administration and maintainance of the vessel and also a great deal of the buying and selling, in particular in Batavia. Jacob Bickes Bakker financed the journeys, both equipment and cargo; in return he took profit, claimed interest on money invested and charged freight to others, for instance 3.25 rixdollar per person for slaves. His books include the accounts for two return voyages from Batavia and one outgoing to Batavia by *De Hoop*. The last showed a net profit of a little over 282 rixdollars and the two incoming of almost 105 and a little over 207 rixdollars, respectively. This resulted in net-profit rates for the entire investment in cargo and shipping of between 7 and 18%. Of course, much depended on the merchandise. Moreover, on returning to Makassar Barend Jansz would only sell part of the cargo; what was not sold in a few weeks time would be finally handed over to the owner, Jacob Bickes Bakker himself (Koopmansboeken 16:31-5-1769, 31-12-1769).

The volume of shipping

Measured in either the number of ship movements or in *last*, the volume of both private and VOC shipping tended to fluctuate considerably (Table A, B, C, D). The level of activity in individual years could be heavily influenced by occasional events and specific circumstances. For instance, in 1796-1797 commerce declined because of the occupation of Ambon and Banda by the English. In other cases, political turmoil within Sulawesi itself inhibited private activity but generated contrasting high levels by the VOC. Examples of this were 1733-1734 and 1776-1777. In the 1730s pirate raids flowered into the great war of Arung Singkang and Karaeng Bontolangkas against the VOC and its allies, while Sangkilang's rebellion in 1776 also caused chaos in Sulawesi. These wars hampered private trade, while the VOC had to bring in reinforcements. To minimize the impact of these annual fluctuations, it is better to look at the three-year or four-year blocks, as is done in Table 7.

No clear long-term trends emerge in the number of ship movements, mainly because of the differences in the average volume per ship. As explained previously, in the private sector at first the ship types changed, while later on growth occurred in average ship volumes. The VOC seems to have witnessed a similar trend of average growth per vessel, at least until the 1780s. Because of these factors, the best way to evaluate long-term development is by looking at volume as measured in *last*.

Table 7. Average annual number of ship movements and volume of shipping of the private sector and the VOC

	Private		VOC		Total	
	mov.	*last*	mov.	*last*	mov.	*last*
1720s	522	3,755	10	1,135	533	4,890
1760s	555	3,232	15	2,134	570	5,366
1770s	432	3,275	8	2,614	440	5,889
1780s	589	5,450	11	1,318	600	6,768

Between about 1725 and about 1790 the total volume of shipping in Makassar showed an average annual growth of 0.5%, with results for the private sector and the VOC being 0.6 and 0.2%, respectively. However, prior to the last third of the century total volume growth was slow, about 0.2% per annum, and before about 1780 most of this was realized by the VOC. The private sector declined or at best stabilized. That stagnation was the rule in the second third of the century is also the impression obtained from other sources (see pp. 27-33).

After 1780, a quite different picture emerged. With the beginning of the Fourth Anglo-Dutch War the VOC ran into shortages of manpower and ships, causing a dramatic decrease in shipping volume between the mid-1770s and the late 1780s. As a result, some Company officials even contemplated supplying Makassar by hiring space on private ships, for instance on Burgher vessels. The local VOC authorities in Makassar were very much opposed. It was argued that Burgher ships were too small for this and that the tax farm of import and export duties would decline owing to the simple fact that Burgher skippers busy carrying for the VOC would carry fewer commercial commodities. Finally and most importantly, the prestige of the VOC would be greatly damaged if it became known after the war that it was no longer capable itself of sending at least one big ship a year (VOC 3760:75-8). In the meantime, Makassar's private sector had boomed, showing an average annual growth rate of about 2,6% between the end of the 1760s and the late 1780s. It would be easy to say that this success was a direct result of the VOC's incapacity, but this would be facile, because other, earlier, factors were also at work, such as the intensification of private trade with China.

The share of the VOC in Makassar's traffic had grown from almost 25% in the 1720s to almost 45% in the 1770s. Although these figures are quite impressive, the Company's position there was not as strong as in Java, where it claimed over 50% by the 1770s (Knaap 1996:48). After about 1780 the VOC share fell to less than 20%. Unsurprisingly, for the century as a whole more than two-thirds of VOC volume was realized by its *spiegelschepen*. As noted previously, private shipping was more subject to change (Table G). In

the 1720s the *chialoup* was responsible for 55% of volume. In the 1760s the *paduwakang* claimed the lion's share with 60%, which then climbed even higher, to 73% in the 1780s.

In the meantime the average volume of private vessels was also changing (Table F), dropping from 7 *last* in the 1720s to 6 in the 1760s. The above-mentioned shift from *chialoup* to *paduwakang* was mainly responsible for this decline. However, soon afterwards the average volume was rising again, to 8 *last* in the 1770s and 9 in the 1780s. The average volume of VOC vessels showed a rather irregular pattern: from 114 *last* in the 1720s to 142 in the 1760s, to 327 in the 1770s and, finally, 120 in the 1780s. The rather high average of the 1770s can be explained by the absence of local VOC vessels going on the *kruistocht*, causing an overrepresentation of the *spiegelschip*. The drop after 1780 was caused by the re-appearance of local patrol vessels and the shortage of large-size *spiegelschepen*.

The direction of shipping

The VOC's pattern of ports of departure and destination did not change much over time, in contrast to the private sector. Measured in ship movements, about 33% of VOC traffic out of a total of 181 moves was with Batavia, most being incoming, because many an outgoing vessel continued on to Maluku, or was told to return to Batavia by way of Bima in order to carry sappanwood. Because of this, Bima, which was in fact the third most important destination for VOC ships, with 10% of ship movements, only appeared in Makassar's register as departing. The second most important VOC destination was the *kruistocht*, or the cruising expedition, with 31%. Such patrols were undertaken annually by a flotilla of two to five *chialoup* and *pencalang* belonging to the local VOC garrison in Makassar. These ships usually made a tour of several months along the islands of Nusa Tenggara, in particular between Sumbawa and Timor, and near Buton, in order to check private maritime traffic for 'illegal' activities, such as sailing without a ship's pass or sailing with a pass but in 'forbidden' areas, or 'smuggling' products falling under VOC monopoly, such as the finer spices from Maluku and certain brands of Indian textiles.

Here is probably the best place to point out that the Flores Sea south of Makassar was very dangerous, with many coral reefs and frequent storms damaging or wrecking not only private ships, but also VOC vessels. In the sixteen years under consideration there were five VOC shipwrecks, three of *spiegelschepen*. No wonder such disasters heavily influenced the performance of VOC shipping in particular years. Because of the relatively huge size of the *spiegelschepen*, a different pattern of the VOC's ports of departure and desti-

nation emerges if volume rather than ship movements is taken into account. Out of a total volume of 28,376 *last* for sixteen years, Batavia could count on 48%, followed by Bima with 17%. As the *kruistocht* was sailed with smaller types of vessel, it ranked only third with 8%. The three VOC provinces in Maluku, namely Ambon, Banda and Ternate, had an aggregate score of 15% of the volume.

Whereas the number of incoming and outgoing ships was more or less equal in the VOC sector, here the private sector showed some imbalances over time (Table A). Generally speaking, one might say that the ratio was about 9 vessels arriving to 11 departing. This imbalance was, to some extent, corrected by the fact that the incoming side as a whole showed a little more volume than the outgoing (Table C). Under-registration is, of course, one of the explanations for this situation. However, it should be pointed out that most imbalance occurred on certain routes and among certain categories of skippers. As will be shown later, in so far as routes were concerned (Table V; pp. 127-33), Sumbawa was responsible for about one-third of the short-fall of incoming ships in the 1720s and for 60 to 90% in the last part of the century. Considering skippers' labels, more than half of the shortage of the 1720s should be credited to the category 'ethnicity unknown', mostly Sulawesians, while from the 1760s onwards some 60 to 90% was caused by Galesongers. This indicates that there is an obvious explanation for under-registration, namely that it mainly concerned Sulawesian skippers from outlying districts or vassal states who only came to Makassar to obtain a sea pass for an overseas journey and who did not show up on their return, probably because they sailed straight home. Hence they only were visible in the sources after leaving the port, having obtained their pass.

This partial 'evasion' raises the question of what such skippers did with their cargoes. They probably sold their commodities to the Chinese or other traders in other ports in the region. This can be interpreted as an important, if hypothetical, example of how Makassar's trade connected with networks independent of the VOC. Whatever this may be, the pattern of ports in the private sector covered in the harbourmasters' registers (Table M, O) was relatively complex, with sharp variations in both ship movements and volume from year to year. However, concentrating again on the three-year and four-year blocks, it is clear that there were actually four ports which played a major role for Makassar: Batavia, Sumbawa, Ambon and Amoy, representing the western, southern, eastern and northern links, respectively. Batavia was a constant player on the scene, while the impact of the other three was more limited in time.

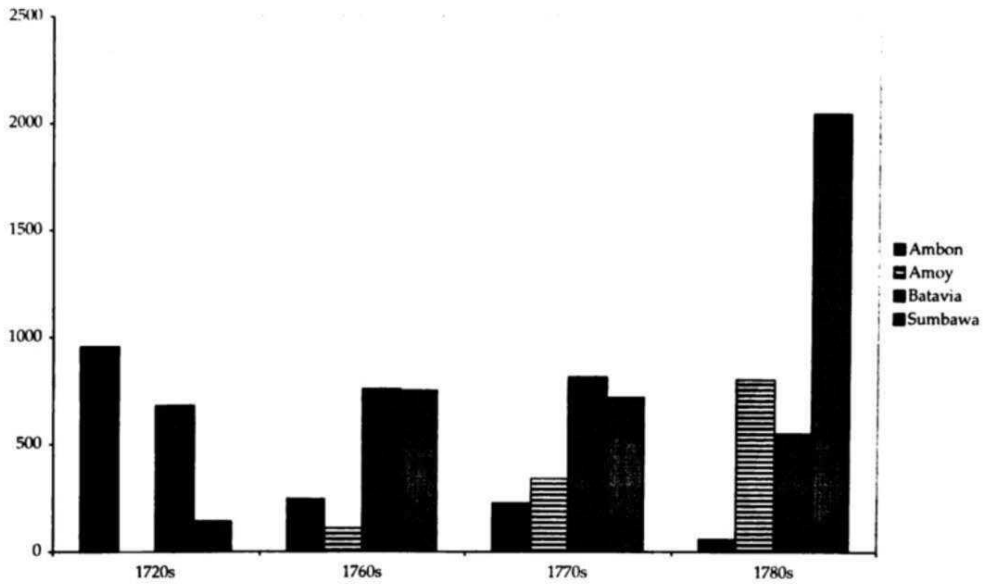


Figure 1. Annual average volume of traffic for Ambon, Amoy, Batavia, Sumbawa, in *last*

Batavia's role was remarkably stable during the century, particularly for ship movements, with just over 50 per year, representing some 10% of Makassar's traffic. Measured in volume, there was more variation. In the 1720s Batavia's share was less than 20%. However, in the 1760s and 1770s it had grown to about 25%, or 700 to 800 *last*. Some of this growth could be explained by the fact that Java's second port, Semarang, had become less significant. During the 1720s it had been important, with almost 20% of ship movements and some 15% of volume, but by 1770 it had declined to about 5 and 8%, respectively. In the 1780s Batavia's trade with Makassar dropped to a little over 500 *last* or only about 10% of volume. This corresponds with the changes in the vessels used, as the smaller *paduwakang* replaced the *chialoup*.

In Makassar's southern hemisphere, the Flores Sea and adjacent areas, Sumbawa was a constant presence. Only in the 1720s was there another port in the region which was more significant, namely Bima. In this period the connection with Sumbawa might have experienced setbacks because of a long-lasting conflict with Balinese principalities over control of Lombok (Hägerdal 2001:97-8, 109). However, during the second third of the century Sumbawa established a firm lead. In the 1760s and 1770s Sumbawa claimed 33% or more of the total number of ship movements, about 170 per annum, or, with a little over 700 *last*, between 20 and 25% of the total volume, second

only to Batavia. After 1780 Sumbawa continued to grow, reaching a level of over 250 ship movements and some 2,000 *last*, or more than 45% of ship movements and almost 40% of volume. Sumbawa appears to have been the main beneficiary of the general increase in traffic in the Flores Sea. Besides profiting from this, it also increasingly captured traffic from rivals in the area. As mentioned above, Bima, which had held 18% of ship movements and 7% of volume in the 1720s, was the first victim. However, in the second third of the century, Sumbawa was challenged by Bonerate, which, by the 1760s, had taken 25% of moves and 13% of volume. But Bonerate's role was also unstable; after 1770 its role weakened in the face of such alternatives as Buton and Bugis. Of these two, Buton ranked first. In the 1770s and 1780s it held 11% of ship movements and 6 to 8% of volume.

To the east, Ambon and, to a lesser extent, Banda, were important connections for Makassar in the 1720s. This was not so visible in the number of ship movements, only 5 and 4%, respectively, because these were ports of call for relatively large-size *chialoup*. In volume, however, Ambon absorbed 25%, equal to about 950 *last*, and consequently Ambon ranked first among all of Makassar's individual partners. In terms of volume Banda also had a good record with about 15%. But in the second third of the century connections to both Ambon and Banda declined drastically, with the latter losing all contact with Makassar in some years. The Ambon-based traders specialized in the Makassar trade seem to have been curtailed by stricter VOC regulations, as well as by a conspicuous absence of substantial export items (Knaap 1987b:432-3, 497).

From 1746 Chinese junks started to arrive in Makassar, albeit sometimes with intervals of several years (VOC 776:42; VOC 2674:30; see p. 145). By the 1770s the annual arrival and departure of this one junk was an established and vital element in Makassar's commercial scene. Although this was, of course, negligible in terms of ship movements, being less than 1%, from the point of view of volume it was much more significant. In the 1770s it was already 10% and by the 1780s as much as 15%, or 800 *last*. The growth between the 1770s and 1780s can be explained by the replacement of the smaller *wangkang* by the *chuan* (see p. 147).

The above-mentioned developments, which can best be summarized as the replacement of an east-west by a north-south axis, are confirmed when looking at zones (Table N, P). Makassar's most important western connections, especially those with Java, held out quite well until about 1780. But then volume share declined from more than 35 to a little over 20%. The eastern link, to Maluku, with more than 40% of the volume in the beginning of the century, crumbled to less than 10% in the last third. In these final three decades China emerged and its volume percentage grew to some 15. Nusa Tenggara always was the most important zone for ship movements, with

about 40% in the beginning growing to some 50% after the 1770s. Measured in volume, Nusa Tenggara was less impressive, increasing from less than 15% in the 1720s to a little over 40% in the 1780s. Nonetheless, Makassar's southern hemisphere, defined as the Flores Sea region of Nusa Tenggara plus the southeastern part of Sulawesi, was the area which boomed most. In the 1720s it had held only 17% of the volume of traffic, while in the 1780s it had become 58%.

It must be noted that in the 1720s there was one salient to Makassar's trading networks which deviated from the simple west-east axis. This was the link to the ports surrounding the Makassar Straits, such as Kaili on the east coast, and Pasir, Pulau Laut and Banjarmasin on the Kalimantan side (Table M, O). These four ports represented 13% of ship movements and 7% of volume. Classifying this traffic as either western or northern is difficult. Most of the skippers involved were Wajorese, an ethnicity which was also very active on the route to Java. However, if one looks at the commodities traded, the patterns are quite different from Java. The Makassar Straits region was the main supplier of rattan, but Banjarmasin in particular also emerged as a major source of Chinese wares. Consequently, it is tempting to see these Straits in the 1720s as an indirect link to China and as such a potential threat to Batavia. It will come as no surprise then, that the VOC was not happy with the Kalimantan-Makassar trade. From the 1740s until the end of the 1760s traffic between them was obstructed by prohibitions and limitations (see pp. 26-9). Kaili, located on the Sulawesi side, was less affected by such restrictions than Banjarmasin and Pasir.

As described above, different routes meant different ship types and, hence, different average ship volumes. In the 1720s, at a time when the private sector's average volume was 7 *last*, the highest averages were found on the route to Maluku, where Ambon was being served by vessels of 35 *last* and Banda by those of 29. Low average volumes were found on routes like those to Pasir, Sumbawa and Bima, with 2, 2 and 3 *last*, respectively. In the 1760s, when the general average had declined to 6 *last*, of the major connections Ambon still showed a high average volume of 25 *last*, but after about 1770 it had lost its major rating. Batavia, which had averaged only 11 in the beginning of the century, by the 1760s had grown to 14 and increased further to 18 in the 1770s, when the general average was 8. Low levels were realized in the southern hemisphere, where Bima, Bugis and Bonerate scored 3 *last* on average in the 1760s, only rising to 4 in the 1770s. After 1780, the demise of practically all non-Sulawesian ship types, the Amoy junk of 400 *last* excluded, brought a definitive levelling-off of differences according to route. The general average grew to 9, with Batavia, falling back to 11 *last*, no longer a significant exception. This levelling-off also occurred in the opposite sense, in that differences between mean and low levels were also no longer

as large. This was even true for the lowest score among the major routes, namely that of Bonerate, which, with an average of 5 *last*, was still above the 50% level of the mean.

Shipping and the seasons

Maritime traffic around South Sulawesi and in the Flores Sea was to a large extent determined by the monsoons, and shipping in Makassar during the eighteenth century was more wind influenced than, for example, that of Java (Knaap 1996:55). The months October and, to a lesser extent, November usually had – and have – quiet weather with some shifting winds. However, in December the west or wet monsoon sets in, blowing from Kalimantan and the Java Sea. January and February not only bring steady westerlies, but also heavy rains and rough seas. April is again a month of changing winds. Then, in May, the east or rather southeast monsoon makes its appearance, with winds blowing from Nusa Tenggara and the Australian desert. This is the dry season. Although it remains dry during the following months, June, July and August show rather strong easterly winds, producing heavy seas. In September, the winds die down, after which a new cycle begins in October, which is the calmest month of the entire year (Ammarell 1994:147).

For the VOC in Makassar, December was the quietest month with less than 3% of all ship movements. The least busy for incoming traffic was January and May for outgoing. The most hectic months of the year for the VOC were March and April, with each accounting for about 14% of the moves. Great incoming activity, notably from Batavia, marked the end of the west monsoon in March, while April, the month of the changing winds, saw a considerable outgoing traffic, quite often going back to Batavia via Bima in order to take in sappanwood.

Table Q gives an overview of the private sector's traffic according to season, a pattern which showed some deviations from that of the VOC. The private sector had significant differences throughout the year, with the most active months showing at least five times the number of ship movements of the quietest. The same month was not always responsible for minimum or maximum scores; this reflected occasional changes in weather conditions and/or changing routes. Claiming 2 to 3%, January and February appeared to have been the least busy, the former in the first part of the eighteenth century, the latter gradually taking over in the second part. These were the months of the stormy west monsoon. Most movements occurred in October with some 16 to 17% of annual activity. This is no surprise either because, as noted above, October had the calmest weather of the year. In some years, however, not October but June or May, the beginning of the east monsoon,

showed most activity. Whereas in the first part of the century there is no doubt that October was the month with the most intense traffic, in later decades it had to share this position with a combined May-June.

Separating incoming and outgoing traffic (Table Q), it becomes clear that as minimum months February and January were once more extreme, notably February for arrivals and January for departures. October was by far the most common maximum month for outgoing ships, May for incoming. A gradual change of pattern occurred for arrivals, as earlier in the century October-November were most crowded, while in the last decades it was May-June.

The distribution of maximum activity by route was closely linked to the winds. Sailing to Maluku in the east, an important trading partner only in the earlier 1700s, showed a rather stable pattern with an incoming maximum during the change of season in October and an outgoing maximum in December, when the west monsoon had set in. The Java connection, important at least until the 1780s, showed exactly the opposite, thus presenting an opportunity for transit in Makassar. Consequently, early in the eighteenth century, the maximum number of Java-bound vessels departed in October and the maximum of arrivals was in December. However, during the 1760s and 1770s, a gradual shift in the timing of the Java connections took place. Although December was still the principal month for arrivals in Makassar, departures were no longer always concentrated in October, but also in June. The northern routes displayed a constant pattern, particularly to China, which became so important during the last third of the century. The annual junk entered Makassar in February and left again in June, driven by the monsoon winds of the South China Sea and, to a large extent, of the Makassar Straits.

Looking to the south, to Nusa Tenggara, one notices a less stable pattern, in particular for departures, which over the years showed no specific month with a clear maximum. All the months between March and September, roughly speaking those of the east monsoon, were favourable for outgoing ships. The arrivals from Nusa Tenggara were more predictable, at least until the 1780s, with a peak in October and November, the turn of the season. After about 1780, the pattern was less clear with May-June and September-October as maxima. The other part of Makassar's southern hemisphere, Southeast Sulawesi, only became important in the last third of the century. In the 1760s, when Bonerate was the principal connection in that area, most ships left in November-December. After that, when Buton became dominant, the time of departure shifted more towards the west monsoon, namely to February-March. As far as arrivals were concerned, ships from the nearby southeast mostly came in during May and June, during the east monsoon, just in time to connect to the departing China-bound junk.

Duration and clustering of voyages

For VOC ships based in Makassar, time at sea and stays in the roadstead depended on their employment, typically as patrol vessels of the *kruistocht*, or occasionally, on a voyage to Batavia. In the 1720s patrol ships were away from home for 4 to 6 months, depending on the area which they had to control. In the last third of the century, in the 1760s and 1770s, before the VOC ran short of ships, a cruising voyage lasted even longer: 6 to 7 months. Apparently, the VOC felt the need to tighten control in this later period. The great vessels of the VOC, the *spiegelschepen*, were the lifeline linking Makassar with Batavia. In the beginning of the century, ships involved in a simple to-and-fro sailing usually stayed 2 months in Makassar's roadstead to unload and, whenever a cargo was available, to load. Sometimes, as noted above, the Batavia connection was a part of a triangular voyage, including Bima to take in sappanwood. In that case, the ships arriving from Batavia stayed only 1 to 2 months in the roadstead before setting sail to the south.

It is much more difficult to get a clear idea of the time spent in Makassar's roadstead by private skippers. But two samples of frequently mentioned captains give some idea. The first sample covers 20 skippers of the four-year block of 1722-1726, the second is of 15 from the three-year block 1786-1789. In both samples the selection was more or less evenly spread over the then dominant ethnic labels: for the 1720s Makassarese, Wajorese and Burghers and for the 1780s Chinese, Malays and Company's Subjects. It has to be kept in mind that the selected skippers were among the most active. Those whose names occurred only a few times in the sources are not included. So the following sections present a somewhat distorted picture of skippers' behaviour.

During the 1720s a skipper from the sample spent on average about 5 months in Makassar before setting sail on another voyage, while it took almost 4 months to return. It appears that the Burghers deviated from this pattern and stayed home less, setting sail from Makassar before three months were up. This might indicate they were quite 'professionalized'. The Makassarese also did quite well, spending less than 4 months in port between voyages, and also returning rather quickly, in less than 3 months. In this respect it should be pointed out that the Makassarese specialized in voyages to Bima and Sumbawa, while Burghers and Wajorese included Batavia in their pattern, which was simply much farther away. Indeed, the Wajorese needed the most turnaround time, spending about 7 months in the roads, while their voyages lasted 4.5 months. On average the voyage to Batavia lasted about 5 months, to Sumbawa about 3 and to nearby Bima less than 2. No explanation has yet been found for the difference between the two last mentioned ports.

In the 1780s the sample skippers spent less than 4 months in Makassar before setting sail again, while their journeys took on average 3 months, in both respects one month less than in the 1720s. The obvious reason for this speeding-up of activity was that the voyage to Batavia had almost disappeared from the sample, leaving the bulk of traffic concentrating on the much shorter haul to Makassar's southern hemisphere. The voyage to and from Sumbawa was the most important now, taking about 2.5 months between departure and return and 4 months before setting sail. In fact, compared with the 1720s the Sumbawa voyage as such went a little more quickly, while on the other hand preparations for setting sail took more time. An explanation for this change might be the appearance of the Amoy junk. Many vessels sailing to and from Sumbawa tended to return earlier in order to sell their produce to the junk, which departed in June. As mentioned previously, in the 1780s May and June gained in importance as far as arrivals from Nusa Tenggara were concerned. Looking at the performance of the skippers according to ethnicity, there was not much variation in the length of the journey. However, the time the skippers spent at home in Makassar varied greatly. The Chinese fitted the general average of 4 months, the Malays needed almost 6 months and the Company's Subjects less than 2 months. Explanations for these variations have not been found.

Finally, a few words about another aspect of skippers' behaviour. Throughout the eighteenth century there was a growing tendency to cluster activities on certain routes or, in other words, to prefer sailing in convoy. Whereas in the 1720s most vessels sailed individually, in the last part of the century many sailed in the company of another ship, in particular on departure, no doubt reflecting mounting insecurity at sea because of piracy, already noted at the beginning of this chapter. During the 1760s sailing in convoy mostly occurred on the route to Bonerate and Sumbawa. While Bonerate's role diminished soon afterwards, the 1770s saw increased convoying to Sumbawa. In addition, it was now also seen en route to much further destinations, in particular to Semarang and Batavia. During the 1780s sailing in convoy to Semarang and Batavia decreased somewhat again, but in the case of Sumbawa it remained important. The departure of the larger convoys, in particular those sailing to Bonerate and Sumbawa, must have been quite an occasion in the roadstead of Makassar. Some of these fleets consisted of between 10 and 20 vessels. The total volume was not that impressive as such, varying between 50 and 100 *last*, but this was compensated for by the number of people involved, between 100 and 250 men.

Security might not be the only reason for sailing in convoy. Other factors could be social and/or economic, motivated by investment. Convoying could be social in the sense that skippers from a certain ethnicity or settlement decided to join hands or sails, or based on investment because some

businessmen might finance a particular fleet. It is known from nineteenth-century information, for instance, that in the case of trepang fisheries fleets were formed to join hands (McKnight 1976:1). Some of the largest fleets found in the harbourmasters' registers showed a remarkable cohesion as far as skippers' ethnicities were concerned. For instance, the two fleets consisting of 11 or more vessels in the years 1766-1769, both heading for Bonerate, were almost entirely captained by Company's Subjects. One of the four convoys of 11 ships or more in 1774-1777, heading for Sumbawa, was primarily skippered by Galesongers, and one of the four of 1786-1789, also going to Sumbawa, was almost entirely in the hands of Chinese. On the other hand, there were also ethnically mixed convoys, combining three to five communities. Usually Chinese skippers took part in such ventures together with Galesongers, Malays, Buginese and Company's Subjects. Although no information whatsoever is available about the ownership of these vessels, it nevertheless might be assumed that sharing investment was one of the reasons to flock together.

Summary

During the eighteenth century the most important development as far as shipping hardware was concerned was the 'localization' of ship types, with the advent of the *paduwakang* and the disappearance of non-Sulawesian types, such as the *chialoup*, being the most striking features. Within this process, improvements in Sulawesian types as such, namely the replacement of the *pankor* by the larger *paduwakang*, testified to the enhanced capability of indigenous shipbuilders. Changes in ship types were also very much connected to shifts in trading networks, with a significant decline in Maluku contacts, but a tremendous increase in sailings to Makassar's southern hemisphere. This last was mainly caused by the Chinese demand for certain products, generated by a new, direct link to Amoy.

Another keyword in the development of shipping was 'Sinification', largely a result of the above-mentioned change in trading networks. In the beginning of the century, the most important group of skippers were Burghers, later displaced by Chinese. Besides taking over from the Burghers, Chinese skippers also seemed to have captured a market share from indigenous sailors, which is rather unexpected given the 'localization' of ship types. Apart from Chinese strength in investment and marketing, a possible cause is the avoidance of VOC Makassar by Sulawesian skippers, although the extent of this is difficult to establish.

The volume of shipping increased throughout the eighteenth century at an annual rate of about 0.5%, although the mid-century seems to have been

a time of decline or, at best, of stagnation. The private sector shrank during this period, while on the contrary the VOC grew. The VOC's share in the traffic, measured in volume, thus increased from about 25 to about 45%. After the 1770s the private sector recovered, mainly because of the demand from China, so that after 1780 the level of private traffic was well above that of the beginning of the century. At about the same time, the VOC itself experienced a disastrous decline in its shipping, because of shortages due to the Fourth Anglo-Dutch War, causing its traffic share to drop to less than 20%.

CHAPTER IV

The flow of goods

Commodities traded in the private sector are central to this chapter. First we will consider the rather complex issue of cargo composition. Was it possible for every ship to obtain a suitable loading and what were the separate products that were compiled to form a cargo? The second, rather extensive, section deals with the general development of trade in the most important commodities, examining origins, destinations and specialization by different categories of skippers. Before starting the discussion, it should be stated that the term 'load' or 'shipment' is used here to designate a single consignment of one particular product. Consequently, a single ship might carry one cargo consisting of several loads or shipments.

General characteristics of cargoes

Generally speaking, more loads were exported than imported (Table R). Of all registered loads throughout the century, 53% were for export. This is more or less in line with the general pattern of shipping, with more outgoing than incoming vessels (Table A). But some change occurred. In the 1720s the incoming ships, 48% of all ship movements, carried about 56% of loads. During the 1760s, 1770s and 1780s incoming ships, 44% of the ship movements, carried only 50, 42 and 39% of the loads, respectively. Consequently, a first but careful conclusion might be that the export orientation was only emerging in the later eighteenth century. The shift from a west-east to a north-south axis certainly influenced this development. In the first part of the century, Makassar's own role as a supplier to international trade, in particular of bulk commodities, such as rice, was significant. Imports, in particular of various luxury items, were needed to keep the balance. In the latter half of the century, the north-south connection enormously strengthened Makassar's other commercial role, that of a transit emporium. Since a proportion of transit commodities from the south, in particular sea products, were not so much 'bought' or 'bartered' as 'gathered', there was less linked import of exchange commodities for these goods.

Not all private sector vessels entering or leaving the port carried a cargo. Many carried nothing at all or only *mondkost*, meaning victuals or provisions for those on board. As can be seen in Table S and, later on in more detail, in Table V and W, almost a quarter of the ships sailed without merchandise. However, the degree to which this occurred tended to change over time, as might be seen in Table 8 below. The general conclusion is that the private sector's success in obtaining cargo improved greatly during the course of the century. In the 1720s almost 45% of ships carried no trade goods, namely about one-half of the outgoing and a little over one-third of incoming vessels. From the 1760s onwards the situation was much better, at first primarily in the case of arrivals but later on also in the case of departures, until the no-merchandise category reached a level of less than 10% towards the 1780s.

Table 8. Merchandise and loads on board private sector ships (rounded-off)

	No merchandise (%)			Average loads per ship movement		
	Inc.	Out.	Total	Inc.	Out.	Total
1720s	35	51	44	2.78	2.71	2.76
1760s	16	40	30	2.01	2.28	2.16
1770s	6	11	9	2.01	2.27	2.17
1780s	6	9	7	2.50	3.08	2.86

From Table S it becomes clear that in 1723-1724 only 248 of a total of 489 ships, or 51%, carried commodities. This was the worst year in the sample. Most of the vessels without cargo were bound for Makassar's southern hemisphere bordering the Flores Sea. Later on in the century the proportion of vessels with no merchandise gradually declined. In absolute figures, the number of vessels carrying goods for sale reached its peak in 1788-1789 with a total of 616. In percent, however, this was not the best performing year; 1796-1797 scored the highest percentage of 96. Oddly enough, this was the year in which the VOC's own connections were very disturbed, due to the English naval campaigns. So a partial explanation of this high score might be the private sector's displacement of the VOC, which was already occurring from the 1780s. Details on loading, as well as on cargo variety in relation to routes and ethnicities, will be discussed in the following chapter (see p. 127-44).

A further analysis of the no-merchandise category reveals the following. *Mondkost* or victuals were only mentioned in the beginning of the century; they accounted for about half the ships without commodities in the 1720s. Those sailing with *mondkost* were all outgoing, while the other half, carrying *niets* or 'nothing', were on both sides, but more incoming than outgoing. After about 1730, there is no mention of *mondkost* any longer and it is likely

that, from the 1760s, most *mondkost* cases were included under 'nothing', because that category then showed a pronounced expansion, in particular in departures. However, after the 1760s the category 'nothing' went into decline, but at the same time, an increase could be noticed, in particular after 1780, of cargoes of *enige kleinigheden*, that is 'some small things'. For analysis these 'small things' were considered to be merchandise. They appeared on both sides of the spectrum, but mostly in outgoing ships. Comparing the very different degrees of loading of the 1720s and 1780s, it has to be kept in mind that the first saw rather high figures of *mondkost* and 'nothing', or no-merchandise labels, while the latter saw a high score of 'small things', which were interpreted as merchandise. Considering that the margins between these headings must, in practice, have been thin, the improvement in the degree of loading during the century was probably not as spectacular as it might seem at first sight.

Some specific characteristics emerge in the distribution of *mondkost* and *kleinigheden* according to routes. In the 1720s *mondkost* was registered quite often in outgoing traffic to Nusa Tenggara as well as to the port of Semarang. Since Sulawesi itself had nothing special to offer the Central Javanese economy the inclusion of Semarang is not surprising, nor is the fact that many Nusa Tenggara-bound vessels carried only *mondkost*, as they obtained a substantial share of their return-cargoes by direct collection of sea produce from the natural environment, hence remaining independent of substantial commercial interaction with local populations. The category *kleinigheden* of the 1780s saw some over-representation on the traffic coming in from Java, including Batavia. Apparently, after 1780 the Batavia connection not only experienced a setback in sheer volume of shipping (see p. 71), but probably also in the quality of the cargo. On the outgoing side a concentration of *kleinigheden* might be seen on ships sailing to Nusa Tenggara.

Returning to a more general level of analysis (Table S), it might be noticed that 1733-1734 showed the absolute minimum for the average number of loads per ship movement. In absolute terms this year was also the lowest, namely 582; this can definitely be attributed to political turmoil (see p. 67). The maximum number of loads, namely 1,650, was realized in 1786-1787, which, unsurprisingly, also saw the most loads per move. Table 8 summarizes the main trends for this average number of loads per ship movement, which appears with 2.76 to be higher in the 1720s than in the 1760s or 1770s, which showed 2.16 and 2.17, respectively. Whereas in the 1720s, incoming and outgoing were close, the 1760s and 1770s showed more loads per ship movement for departures than arrivals. The highest score was, however, realized in the 1780s with 2.86. By now the outgoing average had become far higher than the incoming.

Summarizing, it seems the skippers of the 1720s had the most difficulty

in obtaining a cargo. However, if they did manage to get one, it appeared to be reasonably diversified. In the 1760s and the 1770s skippers' chances of sailing with some sort of a cargo had improved. However, cargo variety was less than in the beginning of the century, although we must bear in mind that, in particular in the 1760s, vessels were on average smaller than in the 1720s (see pp. 68-9). Nonetheless, it might be said that as far as the loading of ships is concerned a growth of opportunities had occurred. Finally, the 1780s seem to have offered everybody the chance to get a cargo and the variety of commodities on board was greater than ever before. This applied particularly to departing skippers.

To improve the analysis of the flow of goods we have tried to standardize measurements in order to facilitate comparison between the four multi-year blocks. With the exception of palm sugar, measured in balls, woven silk in rolls, gold thread in chests and rattan and sacrificial paper in bundles, all products have been standardized in pieces, cans or *pikul*, for piece-goods, liquid or dry materials, respectively (Appendix 1). Examples of piece goods were textiles, ceramics and tools, of liquid materials, arrack, beverages and coconut oil, of dry materials, rice, marine and forest produce. To some extent one might say that dry materials stood for agricultural and sea produce, liquid materials for processed agricultural produce and piece goods for manufactured goods. The summary of this standardization is presented in Table 9. Money in different sorts and sizes, European or Asian coins, has been excluded. Of course, standardization of piece goods is relative, as 'one piece' might refer to one length of cloth, one cup and saucer or one bush-knife as well as to one slave.

Table 9. Average annual volume of private sector commodities according to standard of measurement, money excluded (rounded-off)

	Piece goods 1,000 pieces		Liquid materials 100 cans		Dry materials 100 *pikul*	
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
1720s	166	28	97	0	87	233
1760s	126	94	350	4	130	69
1770s	107	116	420	3	123	103
1780s	201	165	752	35	245	126

Despite the problematic character of the standardization, some trends are discernible. The first is that in the beginning of the century piece goods were incoming rather than outgoing. These imports seem to have had a setback in the middle of the century, with recovery only setting in about 1780. On the other hand, exports of piece goods were increasing all the time, until they

were not far behind imports during the last third of the century. As far as liquids were concerned, these were always brought into Makassar and showed a tremendous increase during the middle and final thirds of the century. The situation for dry goods changed dramatically, switching from being primarily exports to a situation with more imports, as during mid-century outgoing levels became rather low, while those incoming tended to increase until by the last third of the century they exceeded exports.

C.M.W. van de Velde: Kampung Melayu in 1846 (KITLV, Prints and drawings 51Y 1)

Because one piece is not the same as one can, let alone as one *pikul*, comparisons are difficult. Yet it is interesting to speculate as to what would emerge if each of the three categories was converted into one imaginary equivalent, for instance a '*pikul*-equivalent'. A possible conversion rate for such a thought-experiment, based on rough equivalents of volume, could be 1 *pikul* is equal to 25 cans is equal to 50 pieces. Such an exercise would enable us to consider general trends in the movement of trade by physical volume. Thus, the total volume of *pikul*-equivalents carried showed a clear decline between the 1720s and around 1770 of about 25%. However, after 1780 the volume showed accelerated growth again, towards a level of more than 50% above that of around 1770 and 25% higher than that of the 1720s. Looking at broad

categories it is obvious that the dry goods were dominant throughout the period. In the beginning of the century they were responsible for about 70% of the physical volume of imports and for 95 to 100% of exports. In the last third of the century dry goods represented a little over 75% of imports and about 80% of exports. Incoming piece goods comprised more than 25% in the beginning of the century, while towards the end they had dropped to 15% or less. However, on the other hand, exports of piece goods showed a reverse trend, namely from less than 5% in the beginning to about 20% during the final decades. From the viewpoint of physical volume, liquid materials never seem to have played a significant role.

This intellectual exercise also reveals that imports tended to grow continuously, with the 1780s level 125% of that of the 1720s. Exports however showed quite another trend, with the level of around 1770 at no more than 40 to 45% of that of the 1720s, while that of the 1780s was still only some 65% of the 1720s. The upshot of these trends was that while in the 1720s the physical volume of exports was twice that of the imports, in the 1780s it was exactly the opposite, imports being double that of exports. Consequently, contrary to what has been said previously in the beginning of this paragraph, if one concentrates exclusively on the physical volume of commodities, the conclusion would be that the maritime economy of Makassar became progressively more import rather than export oriented. However, within this trend, a contrasting development towards a more equal distribution of cargoes and more variety in cargo composition seems to have occurred, particularly for exports. If in the beginning of the century, exports were mainly bulk in character, while imports were mostly a whole variety of mainly luxury piece goods, towards the end the situation was reversed. Bulk was then incoming, with varied and to some extent valuable, piece goods outgoing.

The pattern of imports and exports

An overview of the flow of the most important products is presented in Table T, which is subject to two qualifications. First, some products were not always consistently entered in the sources, which distorts the picture; this was certainly the case with money, which was barely mentioned in the early eighteenth century. Second, there was great annual variation in the quantities of specific products. Whether this was the result of a true interplay of supply and demand or just caused by administrative factors such as changes in registration or even simple under-registration, could only be assessed on the level of each particular commodity. Nevertheless, there seems to have been considerable variation in supply and demand, which must have required constant adaptation by the commercial players in Makassar's market, partic-

ularly by *anakoda*. The general impression is – as stated above – that towards the end of the century, especially in the 1780s, private trade did best. The items listed in Table T will be discussed in this paragraph in sets of more or less related commodities.

The first group in Table T is money, or, to be more precise, two different types of coins: Chinese *picis* or *kepengs* and European *rijksdaalders* or rixdollars. The first were copper coins from China with a hole in the middle enabling them to be strung together for easy transport in large quantities. In the later part of the seventeenth century there also had been leaden *picis*, issued by the courts of Gowa and Bone. However, in the eighteenth century these are not recorded (VOC 1579:127-9). Copper *picis* were used as small change and the value of one piece, at least in the last part of the eighteenth century, was about 1/375 to 1/380 of a rixdollar (*Verhandeling* 1786:296-7, 321). Consequently, 1,000 *picis* were equal to about 2.67 rixdollar. 'Rixdollar' was generally used by the VOC itself as a money of account, equivalent to 48 *stuivers*. So in the harbourmasters' records the label 'rixdollar' represented all sorts of actual European currency, such as the *dukaton*, the *reaal*, probably the *keizerdaalder*, the Batavian *ropij*, the *schelling*, the double and the single *stuiver*, all made of silver, as well as the copper *duit*. These coins were brought into circulation by the VOC, either in Makassar or in any other of its provinces in Asia. Usually the private sector seems to have reckoned 60 *stuivers* for a rixdollar. However, in the personal accounts of Jacob Bickes Bakker we see that a 48 *stuivers* exchange rate was consistently applied (*Verhandeling* 1786:295, 308-12; Koopmansboeken 16).

The prospects for analysing the flow of money are at a maximum in the three-year blocks of the last part of the century, given the lack of information on money in the early decades. However, in 1717-1718 loads of 'some cash' were mentioned, 13 incoming, practically all from Ambon, and 16 outgoing, half going to Semarang, the other half to Makassar's southern hemisphere, namely the Flores Sea region. This pattern, of bringing in money from Maluku to pay for the goods carried from Makassar and sending money to the Flores Sea and Java to pay for their products, was also visible later on in the century, but on a much larger scale.

Table 10. Annual average private sector imports and exports of money (rounded-off)

	Picis (1000 p.)		Rixdollars (pieces)	
	Import	Export	Import	Export
1720s	–	–	–	–
1760s	610	1,612	7,333	13,092
1770s	–	1,170	8,667	24,137
1780s	–	50	5,033	44,772

Information about *picis* reached its peak during the 1760s, when annual average imports amounted to approximately 610,000 pieces, equivalent to about 1,630 rixdollars, while exports reached a little over 1,610,000, equal to almost 4,305 rixdollars. The import and export of silver coins originating from the VOC was much greater, almost 7,335 and a little over 13,090 rixdollars, respectively. The share of *picis* in the total turnover of currency measured in value was thus only some 20 to 25%. In fact, the value would always lag behind that of VOC coinage.

Although there is no record of *picis* being minted in Makassar itself, the statistics reveal a gap of about 1,000,000 coins between imports and exports. Severe under-registration of imports must have been the case, unless there might be a considerable amount coming in by land. Unfortunately, there is no evidence for such a movement. In the 1760s, the annual average of shipments of *picis* brought into Makassar was just over 4, each containing about 141,000 pieces. The interesting thing is that most came in from Batavia. It should be recalled, however, that the Amoy junk is only recorded in the last year of the 1760s block, namely in 1768-1769. Chinese skippers dominated *picis* imports, taking 84%. On the outgoing side there was much more diversification. In the 1760s, some 38 shipments went out per annum, almost exclusively to Sumbawa, containing on average about 42,000 pieces or 112 rixdollars. The skippers carrying *picis* were about one-half Chinese and for one-fifth Company's Subject, taking 60 and 19% of the total volume respectively. In the 1770s the harbourmasters no longer listed imports of *picis*, but exports amounted to an average of more than 1,170,000 per annum, some 11 to 12% of the total value of coin exports. Again, a gap of about 1,000,000 pieces loomed large between imports and exports. The annual number of outgoing shipments had declined to 16, but the average shipment size increased to a little over 73,000 pieces or 195 rixdollars. Sumbawa was still almost the only destination, with Chinese skippers carrying about half the shipments and Company's Subjects about one-third. Measured in amounts, Chinese were responsible for 53% and Company's Subjects for 31%.

Table 10 also lists imports and exports of rixdollars. It appears that the discrepancy between the two tended to grow over time. One could say that before 1780 the gap, 16,000 rixdollars at the most, might still be explained by the fact that the VOC itself introduced large numbers of coins into Makassar to finance its own activities and that part of this money found its way into the private sector. However, towards the end of the 1780s the difference almost reached 40,000 rixdollars. It is obvious that much of the explanation of this imbalance lies in under-registration of incoming traffic. A very limited annual number of incoming shipments was recorded, from 4 in the 1760s to 2 in the 1780s. The average arriving shipment of the 1760s was a little over 1,800 rixdollars, while in the 1770s and 1780s it increased to 2,500 and 2,600. Most of these shipments

by far came from Ambon, usually brought by Burgher and Chinese skippers.

The average annual number of outgoing loads of rixdollars tended to grow, from 45 to 78 and then to 109, for the 1760s, 1770s and 1780s, respectively, consisting of an average of approximately 291, 309 and 411 rixdollars. Most were bound for the Flores Sea region, with Sumbawa outranking all other ports. However, over time, an increase in exports to other areas, notably to Semarang in Java, could also be seen, growing from about 25% of total volume in the 1760s to more than 40% in the 1780s. Finally, a word on the ethnicity of skippers exporting rixdollars. In the 1760s, about three-quarters were Galesonger or Company's Subject. Nonetheless, Chinese skippers carried 29% of the total volume and Malays 19%. In the 1770s, Galesonger skippers represented more than one half, Company's Subjects about one-sixth. Measured in volume, the latter carried 19% and Malays 16%. The role of the Chinese had declined. In the 1780s, the Galesongers were only exporting rixdollars in about one-third of the movements, representing 11% of volume. Company's Subjects and Malays, each with about one-sixth of shipments, were responsible for 14 and 21% of the volume, respectively.

South Sulawesi had a reputation as an agricultural producer, because of its rice, which in some areas was cultivated on wetlands (Valentijn 1726:138; Pelras 1996:230). Except for the beginning of the century, paddy or unhusked rice was never traded in great quantities, as can be seen in Table 11. On the other hand, at the same time the private sector exported husked rice in relatively large amounts, almost 20,000 *pikul*, the VOC added at least 5,000 more. However, in the last part of the century all this had changed. Exports of rice had almost vanished and by the 1780s private sector statistics show that Makassar had become a net-importer of about 11,000 *pikul*. In fact, the previous conclusion that in the beginning of the century bulk commodities were mainly exported and that this situation was later totally reversed, with bulk imports rather than exports, should be ascribed to the disappearance of rice exports and, to a lesser extent, the emergence of rice imports. This can be partly explained by external factors, such as the decline of the market in Maluku (Knaap 1987b:432, 497). But factors internal to Sulawesi, notably intermittant warfare and the expanding power of Bone over the rice producing areas, may well have caused a decline in the supply to Makassar.

Paddy imports of the 1720s averaged a little over 9 separate shipments per annum of approximately 180 *pikul*. More than half these loads and 52% of volume were brought from Bima, often by Makassarese skippers. The annual average of outgoing shipments was much smaller, almost 3, but they carried more paddy, averaging 280 *pikul*. The main destination was Kaili, absorbing 70% of the volume. Unfortunately, in most of these cases the skippers' ethnicity remains unknown.

Table 11. Annual average private sector imports and exports of paddy and rice, in *pikul* (rounded-off)

	Paddy		Rice	
	Import	Export	Import	Export
1720s	1,667	771	2,554	19,364
1760s	583	61	7,066	1,380
1770s	-	569	6,072	1,215
1780s	189	83	11,155	527

During the same 1720s an annual average of almost 14 shipments of rice was brought into Makassar, of similar average quantities to those of paddy, namely 186 *pikul*. Most shipments also originated in Bima, but in terms of volume this port was outstripped by Semarang with 69%. Burghers carried 64% of all import volume. It is likely that Semarang's rice was re-exported. Rice was carried out of Makassar in annual averages of more than 47 loads of 410 *pikul*, with about a quarter of shipments and 56% of the total volume going to Ambon. Almost one-fifth of the loads, 33% of all volume, was sent to Banda. The average load for Banda was somewhat smaller, 706 *pikul*, than the Ambon-bound one, 873 *pikul*. Other important destinations, but with relatively small average shipments, were Banjarmasin and Batavia. Almost 47% of all rice export volume was carried by Burghers and 37% by Chinese. Although large numbers of Wajorese skippers were also active, their volume share remained small, only 3%.

As mentioned above, in the second part of the century Makassar became a net-importer of rice. During the 1760s about half of it, 3,549 *pikul*, came from Java, in particular from Semarang and Batavia, while another 3,291 *pikul* was imported just from Sumbawa. The average shipment from Java was 380 *pikul*, whereas from Sumbawa it was only 75. The overall average load was 121 *pikul*, with about 58 shipments per annum, of which about one-third were carried in Company's Subjects' ships and more than a quarter by Chinese skippers. The former, however, only carried 22% of the total volume, the latter 33%. By the 1780s imports had climbed to 11,155 *pikul* and shipments to 78 per annum averaging 143 *pikul*. Java's proportion of total import volume had fallen to some 10%. All growth since about 1780, as well as the capturing of the Java share, was realized by Sumbawa, which supplied Makassar annually with an average of 9,833 *pikul*, or about 88% of the total volume. Sumbawa's share in shipments had risen to more than 85%, averaging 144 *pikul*. Among the ethnicities carrying rice the Chinese claimed half of the shipments, leaving the Company's Subjects and the Malays with one-fifth each. Measured in volume, the Chinese carried 57% and the Company's Subjects and Malays 15% each.

Coconut, coconut oil and palm sugar form another group of related products, all coming from palms, and to a large extent from one specific species, the Cocos Nucifera. Coconut oil was used for cooking as well as in lamps. The general trading pattern of these products is summarized in Table 12. It is immediately apparent that palm sugar was of minor importance on the Makassar market and that the coconut trade seems to have boomed only in the early years of the century. However, the high figure for the 1720s average annual imports, namely 85,100 nuts, is largely due to a sudden flooding of the Makassar market in 1724-1725 by skippers from Kaili, each carrying an average of some 20,000 (Table T). The ethnicity of these skippers remains unknown. Exports of the 1720s involved much smaller shipments, on average less than 900 nuts, a relatively large part of which, 36% of the total volume, were Semarang-bound. Sulawesian ethnicities, such as Makassarese, Wajorese and Buginese, carried 22, 30 and 20% of the total volume, respectively. In the 1770s imports had temporarily grown again, albeit to a lower level than in the 1720s. By then Kaili was again the main supplier and the skippers involved mainly Company's Subjects. The average shipment had fallen to about 1,700 pieces.

Table 12. Annual average private sector imports and exports of coconut, coconut oil and palm sugar (rounded-off)

	Coconut (100 pieces)		Coconut oil (100 cans)		Palm sugar (1,000 balls)	
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
1720s	851	148	3	–	1	8
1760s	3	–	117	1	8	–
1770s	85	–	244	–	3	–
1780s	3	–	261	6	-	–

Coconut oil only became a major import item in the last part of the century. Considering that Kaili was the main exporter of coconuts to Makassar, one might expect it also to provide coconut oil, but it was conspicuously absent from the supplier's list. In the 1760s some 50% of the incoming volume of coconut oil was provided by Ende, on the island of Flores, and 25% by Surabaya. The annual average number of shipments was 10, about two-thirds coming from Ende. A shipment typical of the entire trade comprised 1,170 cans, with Ende averaging only 942 and Surabaya 1,500. The level of imports in the 1770s was, with about 24,400 cans, more than double that of the 1760s. The number of shipments did not change very much, only increasing to 11, but the size of loads increased dramatically, up to 2,218 cans. Surabaya's share in the total imports remained stable, about one-fourth

of the turnover, while Ende's part had grown further to about 75% of total volume, reflecting a growing domination of the market by this supplier. The 1780s saw a levelling-off of growth. As in the case of rice, this was mainly the result of the disappearance of supply from Java. Ende had grown further, providing more than 95% of imports. As these imports were also distributed over a smaller number of shipments, the average load had risen once more, to about 2,662 cans. Over the years, Malay skippers played the main role in Ende's coconut oil trade.

Having considered domesticated palm products, we now turn to those derived from the cultivation of sugar cane, namely fine-grain sugar, candy sugar – crystallized sugar from boiled syrup – and arrack. These were brought in from Java, in particular from the area surrounding Batavia. With the exception of fine-grain sugar, the level of imports at the beginning of the century was much lower than that of the second part. Nevertheless, one has to conclude that both candy as well as fine-grain sugar were never traded in great quantities. Arrack, on the contrary, was a considerable commodity in the Makassar market. Besides through imports, the supply in town was also determined by local production, in particular in the first part of the century. Whether or not most was drunk in the city or distributed to the hinterland remains an open question. From year to year there was a great variation in supply, for instance with sudden import peaks in 1766-1767 and 1787-1788.

Table 13. Annual average private sector imports and exports of arrack, candy sugar and fine-grain sugar (rounded-off)

	Arrack (100 cans)		Candy sugar (*pikul*)		Fine-grain sugar (*pikul*)	
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
1720s	88	–	7	–	45	4
1760s	218	3	53	1	80	–
1770s	160	2	28	–	34	2
1780s	383	14	7	12	17	5

The arrack trade in Makassar itself was subject to heavy regulation, as it fell under the tax farm for the commercial sale of European and Asian alcoholic beverages, as did palm-wine or toddy, though not beer and wine. During the last part of the seventeenth century and the early eighteenth, this local monopoly on the sale of distilled beverages and palm-wine was usually farmed out for a one-year term to one of the Burghers, the sum paid varying from year to year. One of the difficulties confronting the farmer was that

he usually still had a considerable supply in store when his term ended. Consequently, in 1719 it was stipulated that new farmers were obliged to take over their predecessor's remaining stock for a set price. The farmer usually sold his drinks in a special tavern in Vlaardingen or at a house on the beach near Fort Rotterdam's watergate. But his monopoly was undermined by the fact that many people, including Company personnel, started their own public houses selling coffee, beer and wine. It was then only a small step to illegally selling arrack, in particular as everybody was allowed to keep small quantities for domestic consumption. Another problem was liquor imports. Skippers bringing in arrack were obliged to report their cargo to the farmer. From 1719 onwards, they had to bring alcoholic beverages ashore and give them into the farmer's custody, no longer being allowed to leave them on board. If they wanted to sell their supplies they had to do so with the consent of the arrack farmer and pay him a levy of one *stuiver* per can (VOC 1926:29-30; VOC 1944:102-9).

Between 1722 and 1726, the period of our first multi-year block, the annual price for the farm monopoly increased from about 4,000 to about 5,500 rixdollars (VOC 1995:70; VOC 2029-2:26). The 1730s, on the contrary, saw continuous decline, because the war pitting the VOC against Arung Singkang and Karaeng Bontolangkas interrupted the supply of palm-wine from the hinterland, from which arrack was distilled. In 1739 the situation was so bad that the monopoly could not be farmed out at all as the local authorities found the initial bid of 500 rixdollars unacceptably low. After some negotiation an agreement was finally reached at 2,150 rixdollars (VOC 2466:89-90, 1081, 1274). But it could still be worse. In 1742, the sum had decreased to a mere 1,500 rixdollars (VOC 2568:505).

At the end of the 1740s the supply of palm-wine recovered somewhat, but the tax farm did not increase very much. When in 1756 the High Government in Batavia started to issue licenses permitting traders to freely import arrack into Makassar, the sum fell to a bare 600 rixdollars (VOC 2717:11-2; VOC 2883:29; VOC 2908:34). The following year the farmer was compensated for this loss of control over the supply of imported arrack by a tighter regulation on sales for consumption inside Makassar. This restored the farm price to 1,500 to 2,000 rixdollars (VOC 2933:13; VOC 2964:18-9). However, after about ten years, in 1769, the sum dropped again under the 1,000 rixdollar level. It was at this low level that a Chinese took over the farm from a Burgher for the first time, in 1774 (VOC 3273:30; VOC 3412:18-9). Under Chinese control the farm slowly recovered to a level of above 1,500 rixdollars in 1780 and to more than 2,000 around 1785. From this last year onwards the farm was contracted for a three-year term (VOC 3580:20-1; VOC 3732-2:42-3; VOC 3760-2:34). By 1792 the boom was again over and it proved impossible to find anybody for another three-year term. From 1794 onwards the sum was below the 1,000

rixdollar level once more (VOC 3959:114; COI 93:17).

According to Table 13, during the last part of the eighteenth century arrack imports were substantial, no doubt because Batavia-distilled liquor was replacing Makassar's domestic production. The annual number of skippers involved in these imports was never impressive, being 12 in the 1760s, 14 in the 1770s and about 17 in the 1780s. The average shipments were 1,770, 1,146 and 2,252 cans, respectively. The low level of the 1770s might be explained, to a certain extent at least, by the absence of a peak-year in that three-year block. As noted previously, Batavia was responsible for the bulk of these imports. As to the ethnicity of the arrack importers, Burghers and Chinese were dominant. Before 1780 the Burghers carried most shipments, but as the Chinese had on average much bigger loads, the latter sometimes exceeded the former in total volume of imports. This was especially true in 1766-1767, when one Chinese skipper, resident in Cirebon, coming in by way of Batavia, brought in about 50% of that year's arrack. Such a man must have spoiled the market for the others. In the 1780s, when the annual level of imports exceeded 38,000 cans, Burghers and Chinese were more or less equal, both from the viewpoint of number of skippers as well as of average shipments, which had grown to 2,221 cans for the Burghers and 2,167 cans for the Chinese.

The next cluster of commodities might be labelled 'drugs', namely opium from India and tobacco from China and Java. The first, which was very expensive, was not imported in great quantities. In the beginning of the century practically none is recorded as incoming, while later it arrived in relatively small quantities and was probably only consumed by the Sulawesi elite. On the other hand, both Javanese and the more expensive Chinese tobacco entered Makassar in bulk, the latter usually being smoked in pipes and the former as a sort of cigarette (Chen 1939:2; Reid 1988:44-5). However, it must be kept in mind, that just as in the case of arrack, sudden peak years might occur which tended to drive the annual averages of certain year-blocks up to unexpectedly high levels. This happened for instance with Chinese tobacco in 1723-1724 and with Javanese in 1786-1787.

Table 14 shows that at the beginning of the century the total volume of tobacco imports exceeded 2,500 *pikul*, only to drop in the middle of the century to about half that level. This decline was entirely caused by a slump in Javanese tobacco. A partial explanation for this decrease might have been the market preference for Chinese tobacco over Javanese, when it could be afforded. A more important factor must have been the turmoil in Java itself after 1741, in particular in the Central Javanese heartland, where most tobacco was produced. However, recovery set in after about 1757 and after 1780 total tobacco imports exceeded 3,000 *pikul*. It seems that in the beginning of the century all 2,500 *pikul* were consumed in Makassar and surrounding areas,

but that towards the end of the century more than 500 *pikul* were re-exported, leaving Makassar's net-imports at the previous level of about 2,500 *pikul*.

Table 14. Annual average private sector imports and exports of opium, Chinese tobacco and Javanese tobacco, in *pikul* (rounded-off)

	Opium		Chinese tobacco		Javanese tobacco	
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
1720s	-	-	332	-	2,308	1
1760s	11	2	813	38	546	4
1770s	5	1	816	85	902	17
1780s	17	8	884	133	2,397	329

In the 1720s relatively large numbers of skippers sailed into Makassar bearing tobacco, with almost 24 bringing in Chinese and 41 carrying Javanese on an annual average. Shipment size per year averaged 14 *pikul* for the former and 56 for the latter. About two-thirds of Chinese tobacco loads, representing 90% of the total imported volume, came from Batavia. Wajorese skippers were the most numerous in this trade, but their total volume was rather small. Although there were not quite so many Chinese skippers on the Batavia route, just 3 to 4 annually, they carried almost 60% of the total of Chinese tobacco imports, with an average load of 71 *pikul*, five times the average. The other third of incoming shipments of Chinese tobacco originated mainly from Banjarmasin, which, however, only accounted for 10% of the total volume of imports, brought mainly by Wajorese and Buginese skippers. During the 1720s almost all Javanese tobacco, namely 99%, came in from Semarang. For about one-third of all skippers involved the ethnicity is unknown. However, Sulawesian skippers, such as Buginese, Wajorese and Makassarese, who carried 21, 16 and 11% of volume, comprised the remaining two-thirds of Javanese tobacco carriers.

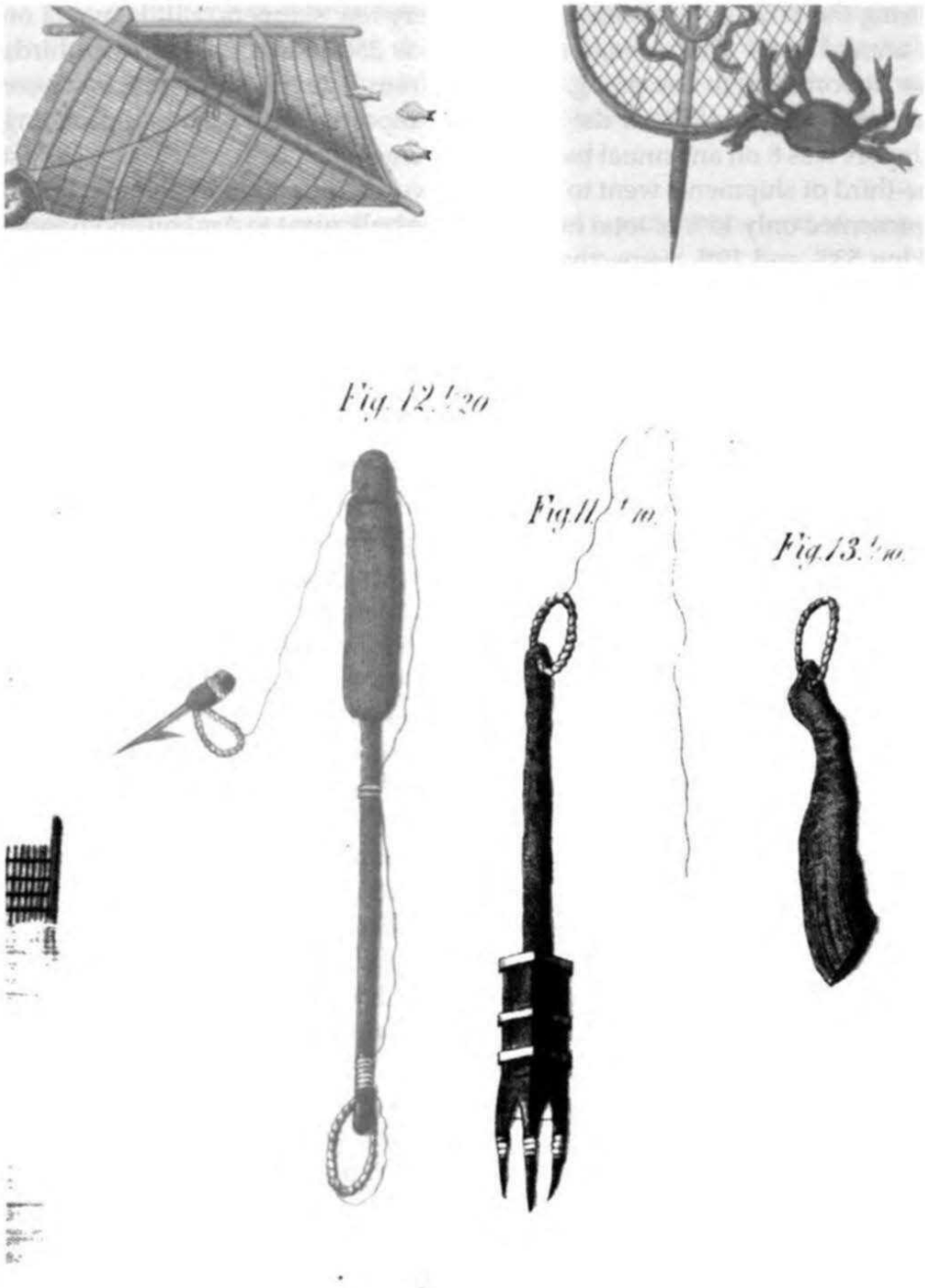
By the 1780s a small number of skippers, on average just under 4 per annum, dominated Chinese tobacco imports, bringing in an average of 241 *pikul*. Most ships came from Batavia, but they only represented 12% of total imported volume, because almost 90% entered Makassar on board the annual junk from Amoy. No wonder Chinese skippers completely controlled this trade. Javanese tobacco imports also showed a higher concentration of trade in the 1780s than in the 1720s. With a total turnover more or less equal to that of the beginning of the century, the annual average number of shipments had declined to about 29, while the average load had risen to 84 *pikul*. Semarang's share had become a bit smaller, namely 84%, because some imports from Java now came by way of Batavia. As far as ethnicity was concerned, it is obvious that the Sulawesians had lost ground, as Chinese and Malay skippers had

come to dominate this trade. During the 1780s the re-exports of Javanese tobacco, almost 16 loads annually averaging 21 *pikul*, mainly went to Bugis lands and, to a lesser extent, to Buton. The skippers involved were Chinese and Company's Subjects. Although re-exports of Chinese tobacco were only one-third of the volume of those of Javanese tobacco, the annual number of shipments appeared to be much higher, namely 22, while the average load was only 6 *pikul*. Once more, Bugis was the principal destination of these exports. The ethnicity of the carriers reflected that of the original importers, with Chinese and Chinese Peranakans taking an obvious lead.

The next group of products are gambier, tea and salt. Gambier was mainly used as an ingredient for the mildly stimulating betel chewing and only became important in Makassar's registered trade towards the end of the century. It usually came in from Sumatra and the Malay Peninsula via Batavia. In the 1780s and in 1796-1797 net-imports would have satisfied an annual gambier consumption of Makassar and its hinterland of some 200 *pikul* per year. Tea from China was already arriving at the beginning of the century, but only became significant after the coming of the annual Amoy junk. In the last part of the century, the level of consumption of officially imported tea in and around Makassar seems to have been about 100 *pikul* per year. Salt was mainly in transit and experienced many ups and downs over the years. Early in the century the level of trade was much greater than later, although after 1780 there was a partial recovery. Most salt came from Java and imports into Makassar must have suffered considerably from the wars ravaging that island in the middle of the century, as was the case with Javanese tobacco. At first Makassar itself also exported some locally produced salt, but this vanished from the records during the second part of the century, losing its market, or at least a part of it, to higher quality Javanese salt. This could explain why the 1720s still showed an export surplus of salt, while later this reversed to an import surplus.

Table 15. Annual average private sector imports and exports of gambier, salt and tea, in *pikul* (rounded-off)

	Gambier		Salt		Tea	
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
1720s	-	-	1,157	1,365	22	1
1760s	-	-	233	216	117	1
1770s	65	-	128	18	115	2
1780s	243	38	817	356	81	4



Atlas 1885, plaat XIII, 11, 12, 13: instruments for catching trepang and turtles

During the 1720s salt was brought in by very few skippers, a little over 3 on an annual basis. The average shipment was 356 *pikul*, of which two-thirds was imported from Semarang, one-third from Batavia. Most skippers were Burghers, carrying 88% of the volume of imports. The number of outgoing skippers was 8 on an annual basis, their average load being 171 *pikul*. Almost one-third of shipments went to Buton. However, measured in volume, Buton represented only 15% of total exports, as the bulk went to Ambon and Banda, taking 53% and 19%, respectively. Although the Burghers, with 7, were not far from a majority among the outgoing skippers, they nevertheless claimed 67% of volume, with impressive average loads of 525 *pikul*. According to numbers of shipments, Sulawesians, in particular Wajorese, played some role exporting salt, to markets in places like Banjarmasin and Pasir.

Compared with the beginning of the century the number of skippers involved in the salt trade had further declined by the 1780s, both incoming and outgoing. There were barely 2 skippers involved annually in imports, bringing average loads of 490 *pikul*, mostly from Surabaya. Semarang had vanished as a supplier of salt to Makassar. One peculiar detail to be mentioned here, is that all incoming salt for 1788-1789, some 1,750 *pikul*, was brought in by one skipper, a Chinese from Cirebon. On the outgoing side skippers hardly reached 4 per annum, with an average shipment of 97 *pikul*. Maluku was still the main destination, with Ternate taking 43, Banda 36 and Ambon 13%, respectively. As for ethnicity, no particular group was outstanding. On both sides of the trade, the domination of the Burghers had disappeared.

Sea products gradually became a very important commodity for eighteenth-century Makassar. There were three major and different items, namely agar-agar or seaweed, trepang or sea slugs and karet or tortoise-shell. These were actually transit-products, mainly meant for the market in China (Knaap 1996:88), which were acquired either through trade and barter or through gathering or hunting. This partly explains why incoming volume was far lower than outgoing, as those who hunted or harvested marine products along the isolated and often uninhabited coasts south of Makassar were not always considered to be traders in the proper sense of the word. In 1728, for instance, the harbourmaster declared that trepang-fishermen were only sold a small pass and that on their return the authorities did not bother to check their passes. The VOC subsequently tried to tighten supervision. Such elusive hunter-gatherers included the so-called Bajau, or Turijene as they were named in Sulawesi, the sea-nomads of the Archipelago (VOC 1579:154; VOC 2100-2:64-8; Sutherland 2000:76, 89). Apart from this, under-registration might also have occurred. Of the three marine products mentioned in Table T and Table 16, karet was the most expensive, in particular that from the hawksbill turtle. Around 1700, Chinese traders were therefore prepared

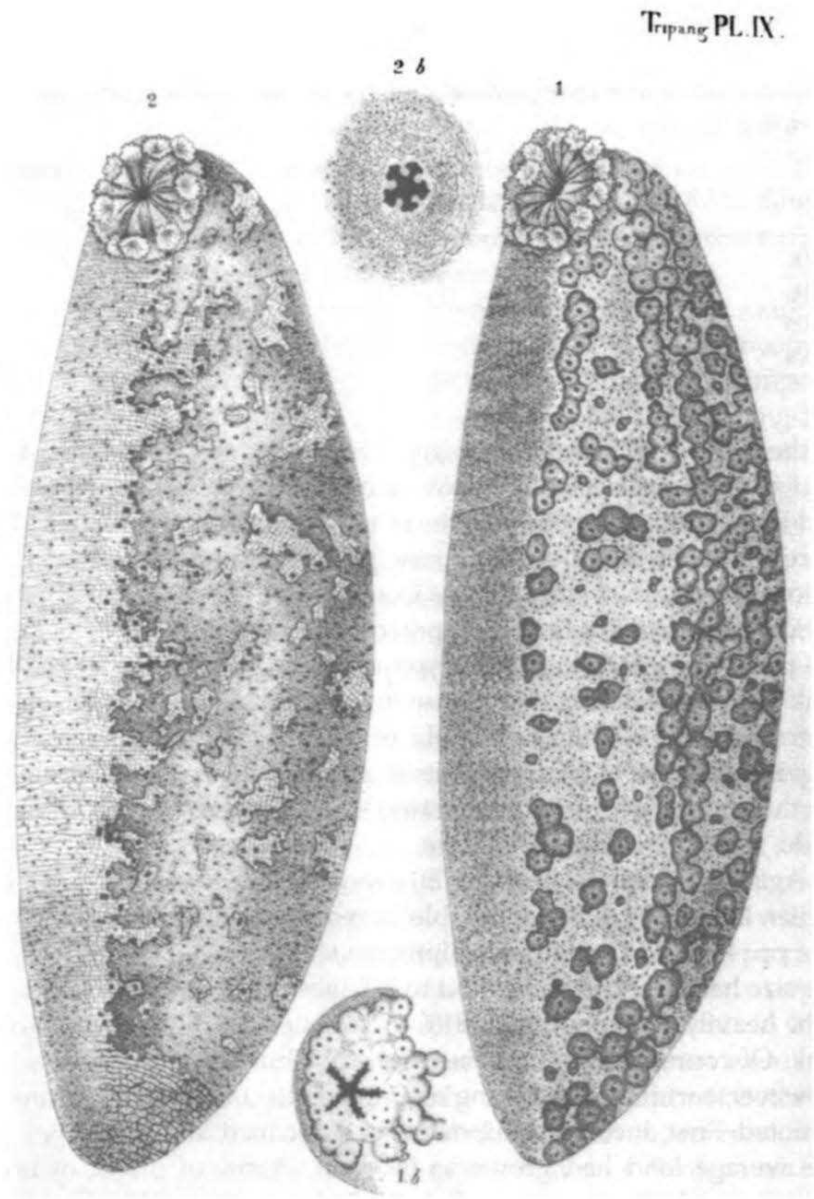
to give credit for one year in advance to sea-nomads in order to obtain this product (VOC 1595:299; Ptak 1991:198). Karet was only traded in rather small quantities, while trepang and, later, agar-agar were products that were traded in bulk. Trepang were sometimes acquired as far away as Australia (McKnight 1976).

Table 16. Annual average private sector imports and exports of agar-agar, trepang and karet, in *pikul* (rounded-off)

	Agar-agar		Trepang		Karet	
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
1720s	–	389	84	592	3	8
1760s	15	1,255	1,857	3,469	6	17
1770s	950	2,873	1,959	4,568	2	11
1780s	758	2,673	2,762	7,068	14	48

In the 1770s Makassar's agar-agar trade was substantial. About 14 ships a year arrived, each carrying on average 70 *pikul*, mainly from Bima, Sumbawa and Bugis, with respective shares of total volume of 44, 30 and 21%. Malays were the most numerous skippers, bringing in about 57% of the volume, followed, at a great distance, by Company's Subjects, with about 17%. The annual number of outgoing shipments was a little more than 11, averaging 254 *pikul*. Most, carrying 79% of volume, were bound for Batavia. The annual junk for Amoy took 20%. Consequently, Batavia remained an important intermediary for China, probably because the Amoy junk was already so heavily laden with other products that its *anakoda* had no alternative to leaving this product to the Batavia-bound ships. Chinese skippers dominated this trade, taking 73% of total volume.

Agar-agar exports in the 1780s were not very different from a decade earlier, in spite of the considerable increase in the tonnage of the yearly junk (see pp. 49, 72, 147). Annual shipments still averaged 13, although the average size had declined somewhat to 206 *pikul*. Batavia-bound loads continued to be heavily dominant, with 81% of volume, leaving only 19% to the Amoy junk. Of course, most skippers were still Chinese, carrying 66% of volume. However, turning to incoming agar-agar, also in the 1780s, a few shifts can be noted. First, incoming shipments had declined to almost 8 per year, while the average load had grown to 99 *pikul*. Places of origin of imports had also changed. Bima's role had dwindled to a mere 15% of volume, while Sumbawa and Bugis claimed 43 and 31%, respectively. Although they had lost some terrain, Malay skippers were still important in this trade, bringing in 41% of the volume, but now Company's Subjects, although fewer in number, carried 44%.



Koningsberger 1904, plate IX: trepang

According to a recent study trepang imports from Southeast Asia into China only started in the beginning of the eighteenth century (Dai Yifeng forthcoming). Thus, during the 1720s the trepang trade in Makassar was still in its infancy. The annual number of incoming shipments was only 3.5, while an average shipment was no more than 24 *pikul*. Most came in from Barru, some 75 kilometres north of Makassar. The importers were either Malay or Sulawesian skippers. Annual outgoing shipments almost numbered 24, carrying on average 26 *pikul*. Almost all shipments were Batavia-bound, with Chinese skippers taking one-third of the volume, Wajorese one-fourth and Burghers one-sixth. During this early stage it is still possible to get an idea of the sorts of trepang traded. Later on in the century, the harbourmasters only occasionally noted this. In the 1720s 37% of the trepang were of the 'stone' variety, 26% were black trepang and 24% white.

By the second half of the century the trepang trade had matured, with many more loads coming in each year than in the early decades. For the 1760s, 1770s and 1780s, they numbered almost 83, 57 and 74, respectively. Although the average volume of the 1760s was still at the same level as at the beginning of the century, with 22 *pikul*, it soon started to grow, to 35 in the 1770s and 37 in the 1780s. During the 1760s Bonerate was the registered origin for most shipments to Makassar, but with rather small loads, perhaps a sign of a lesser role to come. Measured in volume, Bonerate was responsible for 47%, Buton for 29% and Bugis for 16%. It is clear that trepang fishing grounds were different from those for agar-agar. In the 1770s registered ports sending trepang to Makassar were, for volume, Buton 45%, Bugis 22%, Bonerate 14% and Sumbawa 12%. In the 1780s the order was: Buton 38%, Sumbawa 16%, Bugis 13% and Bonerate 12%. It seems as if in the course of the century it came necessary to seek trepang in ever more distant fishing grounds. Shifts also occurred in the extent to which various ethnicities were involved in trepang imports. During the 1760s Company's Subjects led with 51% of volume, followed by Chinese with 24%. In the following decades the Company's Subjects lost ground to 26% in the 1770s, falling further to a mere 15% in the 1780s. The Chinese share, on the other hand, grew to 26% in the 1770s and 36% in the 1780s. In their wake, Chinese Peranakan skippers also became important, with 12% of volume in the 1770s and 23% in the 1780s. The tighter grip of the Chinese was of course closely linked to their unrivalled domination of exports, particularly via the junk. Furthermore, as source areas moved much further away from Makassar, more capital was needed. This might help explain why Chinese took over from Company's Subjects.

Outgoing shipments of trepang had become far less numerous than at the beginning of the century, being almost 14, then more than 11 and finally 12 shipments per annum for the 1760s, 1770s and 1780s, respectively. But in the 1760s the average load was much bigger than during the trade's infancy in

the 1720s and expanded even further, from 254 *pikul* in the 1760s, to 403 in the 1770s and 589 *pikul* in the 1780s. Chinese skippers carried 70% of exports in the 1760s, 91% in the 1770s and 96% in the 1780s. Most shipments were Batavia-bound, but her share in the volume declined because of the annual Amoy junk's role. In the three-year block of the 1760s, when the junk only sailed in 1768-1769, Batavia still claimed 90% of exports. However, in the 1770s, when the Amoy junk came on a regular basis, Batavia's share had declined to 31%. Amoy took the other 69%. In the 1780s, when the China route was being sailed by a bigger vessel, Amoy's share was 85%, an average shipment of trepang having grown to the amazing level of 6,000 *pikul* (see pp. 146-8). Batavia had to make do with a mere 15%.

Gathering or simply harvesting products from the natural environment was not only ocean-based, but also took place ashore, as in the case of birds' nests, which were usually obtained from special cliffs and caves near beaches. This highly valuable delicacy was also much in demand in China (Blussé 1991:320-1). Unlike other collected commodities, which could be found over vast stretches of land or sea, sources for birds' nests were concentrated in small areas. Consequently, supply was often monopolized by local elites. This was, for instance, the case in late-seventeenth century Pasir, where VOC sources describe local power-holders as entangled in the nets of a Chinese trader from Makassar, who secured supplies for a year in advance by giving credit in the shape of commodities (VOC 1595:215). As can be seen in Table 17, birds' nests were traded in small quantities in Makassar, only booming towards the end of the eighteenth century. Banda was the main area of supply.

The other two commodities shown in Table 17 were both harvested in the forest. These were rattan, used for packing commodities and for all sorts of plaited objects and furniture for daily use, and wax, which was important in the textile industry in regions such as Java, for covering parts of cloth during dyeing. The wax trade only became substantial towards the end of the century. Rattan developed quite differently. In the early 1700s it was imported in bulk, only to vanish from incoming cargoes in mid-century, and then emerge as export item. Besides the products mentioned in Table 17, small quantities of quite a number of other forest products also appear in the harbourmasters' registers, for instance shellac and resins from various trees.

Looking at rattan more closely, it appears that during the 1720s the annual number of incoming shipments was a little over 16, each averaging 196 bundles. Kalimantan, on the other side of the Makassar Straits, was the main supplier. More than half the shipments and 52% of total volume came in from Pasir, with other important Kalimantan sources being Pulau Laut and Banjarmasin. Sulawesian skippers, especially Wajorese, dominated this trade. In the middle of the century the import surplus was reversed, becom-

Table 17. Annual average private sector imports and exports of birds' nests, rattan and wax (rounded-off)

	Birds' nests (*pikul*)		Rattan (bundles)		Wax (*pikul*)	
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
1720s	–	–	3,187	63	50	107
1760s	–	1	–	100	45	162
1770s	1	–	867	1,053	127	236
1780s	10	12	–	3,267	186	274

ing a small excess of exports. By the 1780s, exporting rattan had become a bulk trade dominated by a few skippers, averaging just under 2 shipments of 1,690 bundles per annum. Most bundles, 92%, left Makassar on board the annual junk to Amoy, which was carrying on average 3,000 bundles (see p. 148). The question arises whether all the rattan of the 1780s really was of true Sulawesian origin, but since Sulawesi and Makassar in particular, was known as a great exporter of rattan in the early twentieth century (Heyne 1927:342-5), it may indeed be assumed that during the course of the eighteenth century it switched from being an importer to an exporter of rattan.

Turning to wax, during the 1780s we see an annual average of a little over 10 loads of 18 *pikul* each. About half the shipments and 49% of volume came from Buton, compared to about one-quarter and 18% from Bugis. Chinese and Chinese Peranakan skippers each brought in one-third of these. Outgoing annual shipments numbered almost 15, averaging 19 *pikul*. About two-thirds of loads or 74% of volume went to Batavia. Semarang was second with 19% of the volume. About half the outgoing shipments, up to 75% of volume, was handled by Chinese skippers.

The next group of commodities is earthenware, namely bowls and plates, either in combination or as separate items. A number of factors complicate categorization of this commodity. First, there is uncertainty as far as weights and measures are concerned (Appendix 1). Second, there might be great variation in quality and/or size. For instance, both bowls or plates are differentiated into fine, coarse, common, big and small types. According to scattered information from the registration itself bowls might be used to hold water, while plates were meant for holding rice and tea. Items might be labelled as simply being *stenen*, of 'stone', meaning ordinary earthenware, or being of porcelain. Consequently, true standardization is a distant dream. Individual skippers also often carried mixed loads of various qualities. Third, cargo might be broken. Here we are not referring to the ever-present risk that frag-

ile items might be smashed, either during storms or because of bad handling, but rather that what entered Makassar as 'bowls and plates', might leave as single bowls and single plates. This, which was likely to occur in the last part of the century, could greatly distort the picture. In fact, the rather high level of fluctuation (Table T) supports the idea that breaking cargoes was a regular habit in this trade.

Table 18. Annual average private sector imports and exports of bowls, bowls and plates, and plates, in 100 pieces (rounded-off)

	Bowls		Bowls and plates		Plates	
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
1720s	97	13	-	-	309	9
1760s	370	142	123	112	307	141
1770s	27	410	405	233	190	228
1780s	338	307	270	597	481	201

In the 1720s single plates were the only commodity in this cluster which entered Makassar in great quantities, almost 31,000 pieces, annual averages being 27.5 loads of 1,124 pieces. However, several skippers appear more than once. Since they carried more than one quality or one size they are counted separately for each of their several loads or shipments. In fact, the annual number of real skippers was only 19 and their average shipment some 2,170 pieces. Most loads, about 80% or 72% of the volume, came in from Banjarmasin. As this area of Kalimantan is not known for pottery, their real origin must have been in China, with Banjarmasin as transit port. Sulawesian ethnicities, in particular Wajorese, were very active in this trade. They imported about 38% of volume, while the Chinese took another 29%.

By the 1760s, single bowls were the most important import among these items. However, the high annual average of 37,000 pieces was almost entirely due to the year 1768-1769 when, after an interruption, the Amoy junk arrived again, bringing 105,000 pieces divided into three sizes. Single plates showed a similar pattern. Average imports were just over 30,000 per annum, with the 1768-1769 Amoy junk alone responsible for a total of 65,050, classified into five different sorts and sizes. The trade in these products had changed again by the 1770s. Bowl and plate sets were then being brought in on a large scale, more than 40,000 pieces, while on the outgoing side single bowls as well as the combination of bowls and plates appeared to be most popular. The imported sets of bowls and plates reached Makassar in a relatively small number of quite voluminous shipments, the annual number being almost 3, averaging 15,188 pieces. Amoy was the main source with 88% of total volume (see p. 147). On an annual basis the number of real skippers was only 2, their

average load being about 20,250 pieces.

The coming of the annual junk from Amoy had changed the whole character of crockery arrivals, from relatively retail-like quantities in the beginning to genuine wholesale imports in the second part of the century. However, in the case of outgoing bowl and plate sets something of this relatively small volume trade still occurred during the 1770s. Here the annual number of loads was 15, each of only 1,554 pieces. For real skippers the corresponding figures were 10 and 2,331. Exports went to Sumbawa, Bugis and Buton, which took care of 41, 21 and 15% of the volume, respectively. The Chinese dominated this trade with 66% of the turnover. During this period exports of bowls were much greater than those of bowl and plate sets, namely about 41,000 pieces as against 23,000. The 20 annual shipments of bowls averaged 2,048 pieces. Corrected for double-counting of real skippers, shipments numbered a little over 13, each averaging 3,083 pieces. Chinese were responsible for most of these exports, with 69% of the total volume. In this respect, the characteristics of the export trade of bowls, not surprisingly, very much resembled that of the bowl and plate sets. Nonetheless, there were deviations between the commodities, for instance, in markets. In the case of bowls 50% was Sumbawa-bound and 25% went to Bima. Bugis and Buton were insignificant markets for this product.

For the 1780s the pattern of trade for the three items in Table 18 taken together has been reconstructed. The image of incoming trade as wholesale and bulk was further strengthened. On the average, bowls were brought in 1 annual shipment, plates in a little over 1, sets of bowls and plates by less than 1. Average loads were 33,847, 36,050 and 40,500, respectively, with about 98 to 99% coming from Amoy (see p. 148). However, each year the annual junk's cargo, as registered, varied. For instance, in 1786-1787 it carried more or less exclusively bowl and plate sets, the following year it carried single bowls only, while in 1788-1789, finally, all were single plates. The rationale behind these changes is as yet unknown. Whether it really concerned changes in the composition of the cargo or just a different way of classifying commodities by the administrators of the VOC or the authorities of the vessels is a matter of debate. In case the first is true, it might either have been simple dumping or some sort of a market policy formulated by the investors in China and/or the traders on board. For all three products together 3 shipments could be counted on an annual basis, which, in fact, applied to only 2 real skippers.

Turning to the 1780s outgoing loads, the annual average number of bowl and plate sets was almost 24, bowls only almost 18 and plates 16. The ratio between shipments and real skippers was usually 3 : 2, except for bowl and plate sets, where it was 2 : 1. The average load of bowls and plates was 2,523, for bowls a mere 1,740 and for plates only 1,255 pieces. Chinese skippers were important in exports, carrying between 53 and 66% of the total volume,

followed at a great distance by Malays, with 20% at most. Markets varied according to commodity. In the case of bowl and plate sets the 1780s differed from the 1770s. Although Sumbawa, with 30%, was still the main market, the share of Sumbawa-Bugis-Buton had dropped from 77% to 46% of the total turnover. As an alternative, the three Moluccan provinces, namely Banda, Ambon and Ternate, took 47% of exports. In the case of bowls, Sumbawa with 49% showed a constant demand compared to the 1770s. However, Bima was no longer important, while Buton with 32% had come to the fore. The pattern of exports of single plates roughly resembled that of single bowls, with Sumbawa absorbing 41% and Buton 35. For all three products together the number of shipments was a little over 57, which were realized by 28 real skippers.

Table 19 deals with two commodities which actually have nothing in common, namely Butonese chests and iron. They have been put together in one table just for convenience. So far, no information about Butonese chests or boxes is available. Nothing is known of the material of which they were made, their size, purpose or anything else. For Makassar Butonese chests were a transit item of minor importance, which vanished from the records in the second part of the century. They were mainly transported by Wajorese skippers to Batavia, Semarang and Banjarmasin.

The other product of Table 19, namely iron, was not the only metal traded in Makassar, but it was the most important. There was an occasional limited peak in the trade to and from Batavia of tin, which must ultimately have come from the VOC. The same is true, but on a still smaller scale, of lead. Imports of copper were much rarer. However, there appeared to be a rather extensive trade in copperware. The 1770s showed a sudden supply of copper pots, while in the 1780s copper boxes seem to have been popular. The 1780s also saw some export, or probably re-export, of copper gongs and kettles.

Table 19. Annual average private sector imports and exports of Butonese chests and iron (rounded-off)

	Butonese chests (100 pieces)		Iron (*pikul*)	
	Imp.	Exp.	Imp.	Exp.
1720s	4	4	49	8
1760s	–	–	214	57
1770s	–	–	377	52
1780s	–	–	1,072	205

Iron was imported in bars, in sheets and as 'old iron', mainly obtained from the VOC. The level of imports rose impressively during the course of the century: being a blacksmith in Makassar or its hinterland was obviously a promising profession. During the 1770s incoming iron shipments numbered a little over 8, averaging 45 *pikul*. In the 1780s these figures had risen to 15 shipments and 71 *pikul*, respectively. In both cases, almost all, or all, imports came from the VOC capital of Batavia. Some 55 to 60% of loads were carried by Chinese skippers, with 57% of the total imported volume in the 1770s and 50% in the 1780s. Some 20 to 33% of shipments and 31% of the 1770s volume and 33% of the 1780s, was handled by Malay skippers.

Following on from iron, we turn to a group of iron or steel products, namely bush-knives or machetes, usually called *parang*, ordinary knives and, finally, pans. Bush-knives and knives were rather standardized products, but this cannot be said of pans, which were listed in the harbourmasters' registrations in different sorts and sizes. As in the case of earthenware, statistics on iron tools are occasionally difficult to interpret owing to uncertainties about the measures used (Appendix 1) and the great variations in the annual levels of trade. Nevertheless, it is clear that over time commerce in these commodities expanded. At the beginning of the century, when volumes were still modest, bush-knives were an export item, while ordinary knives and pans were imported. In the 1760s bush-knives were still exported, while knives had become a product in transit and pans remained an incoming item. With the exception of pans, the situation had changed again by the 1780s, with bush-knives a commodity in transit and ordinary knives being exported.

Table 20. Annual average private sector imports and exports of bush-knives, knives and pans, in 100 pieces (rounded-off)

	Bush-knives		Knives		Pans	
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
1720s	1	16	3	-	12	-
1760s	24	54	47	48	41	10
1770s	46	43	44	19	48	14
1780s	113	123	76	130	157	43

During the 1780s annual averages for the imports of pans were almost 4 loads of 4,286 pieces. Real skippers for the imports of pans were 3, their shipments averaging 5,239 pans. Amoy provided 97% of the total volume of these imports. However, among the iron-based products coming into Makassar pans were the only item for which the Amoy connection proved important (see pp. 147-8). All incoming bush-knives came from Batavia, the

annual average being 6 shipments of 1,878 pieces. Malay skippers were the main importers, handling 37% of volume. A small group of skippers with unknown ethnicities were responsible for another 33% of the incoming bush-knives. In the case of imports of ordinary knives, averages for shipments were 6 and for volume 1,273 pieces per annum. Once more, Batavia was responsible for practically all the supply. Malays carried about 58% of these imports and Chinese 41%.

In the 1780s, bush-knife exports were relatively frequent, with almost 36 loads, compared to imports. Consequently, an average outgoing shipment was only 345 pieces. With some 40% of these, Malays were still the most important group of traders, taking 53% of the volume. About one-quarter of the skippers were Company's Subjects, who transported 19%. The three most important destinations, in diminishing order of number of shipments, were Buton, Bonerate and Ende, which took 30, 16 and 33% of volume, respectively. Exports of ordinary knives showed a similar pattern to imports. There were almost 33 shipments per annum, averaging 397 pieces. Malays, about two-fifths of all skippers involved, carried 38%, while Company's Subjects, one-quarter of the exporters' total, were responsible for 20% of volume. A group of Chinese Peranakan traders held 18% of the volume. From the viewpoint of number of loads Buton, Bonerate and Ende, in this order, were the main markets, claiming 45, 14 and 16% of volume, respectively.

The next group of products, partly semi-manufactured, were meant for the local textile industry. They were raw cotton and raw silk for producing cloth and gold thread for decorating all sorts of garments. Gold thread was counted in 'chests' and it is still not certain what a 'chest' actually was, perhaps it contained about one *pikul* (Knaap 1996:191; Appendix 1), but it might also be less. A related group of commodities which could have been treated here, but has been omitted from Table 21, owing to the relatively small turnover, is dye-stuffs. Imports of these, such as *bengkudu* and *kasumba*, were at their highest during the 1770s and 1780s.

Makassar's trade in gold thread seems to have developed in a rather unexpected way. At the beginning of the century gold thread was exclusively an import item, the ultimate source being China in most cases. Later, it had become a transit item and finally, in the 1780s, there was even a considerable export surplus. As there is no evidence whatsoever of domestic production of gold thread, the only explanations for this surplus can be uneven supply, for instance in the years prior to 1786, or under-registration of imports. One conclusion could be that gold thread as such was of little importance for South Sulawesi's domestic textile production, a phenomenon which was also witnessed later, in the beginning of the twentieth century (Jasper and Pirngadie 1912:257). One oddity in the 1780s statistics on gold thread is that the meas-

urement was mostly given in *kasten* (chests), *kastjes* (small chests) and *tonnen* (barrels). Without the barrels, export and import were more or less balanced, so it was the barrels, mostly outgoing, which created an export surplus.

Table 21. Annual average private sector imports and exports of raw cotton, gold thread and raw silk (rounded-off)

	Raw cotton (*pikul*)		Gold thread (chests)		Raw silk (*pikul*)	
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
1720s	24	4	36	-	3	-
1760s	1,037	159	21	23	17	33
1770s	279	268	24	40	35	55
1780s	2,901	242	34	112	89	56

The same puzzles concerning import and export levels occurred in the case of raw silk, which was actually rather expensive silk thread or yarn. In the beginning of the century this commodity was hardly seen in Makassar, but in the last third statistics show an occasional export surplus. The imports were, as in the case of gold thread, ultimately from China, mainly from Nanking and Canton, nowadays Nanjing and Guangzhou. In the seventeenth century there seems to have been some silk production in South Sulawesi itself (Jörg 1982:83; Laarhoven 1994:120), but this has not yet been found in the sources after 1700. The occasional export surplus must have been due to either uneven supply or, more likely, under-registration of incoming silk. Re-exports reached their highest levels in the 1770s. At that time annual averages for outgoing shipments reached almost 24, each a bit over 2 *pikul*. About two-thirds of loads, or 71% of volume, went to Sumbawa. The same quantitities, two-thirds of shipments and 71% of volume, were handled by Chinese skippers.

Cotton was produced in South Sulawesi itself, for instance in Bantaeng (Liedermoij 1854:361; Pelras 1996:244). However, domestic supply must have been insufficient, considering the relatively high level of imports in the second part of the eighteenth century, especially in the 1760s and 1780s. During the former period, annual incoming cotton shipments were almost 30, to increase in the 1780s to a little over 47. In the 1760s an average load was 35 *pikul*, in the 1780s it had grown to 61. Some 80 to 90% of these shipments came in from Sumbawa. In the 1760s and 1780s, Sumbawa's share of total volume was 87 and 89%, respectively. About half the shipments was handled by Chinese skippers and about one-quarter by Company's Subjects. The Chinese share in total volume rose from 45% in the 1760s to 60% in the 1780s. In both periods, Company's Subjects carried about 20%. The reason why the 1770s showed much lower import levels than the 1760s and 1780s

might have been due to the beginning of the Sangkilang alias Batara Gowa uprising in South Sulawesi. The then ruling sultan of Sumbawa joined the anti-VOC forces, which could have interrupted the supply of raw cotton to Makassar (Noorduyn 1987:13).

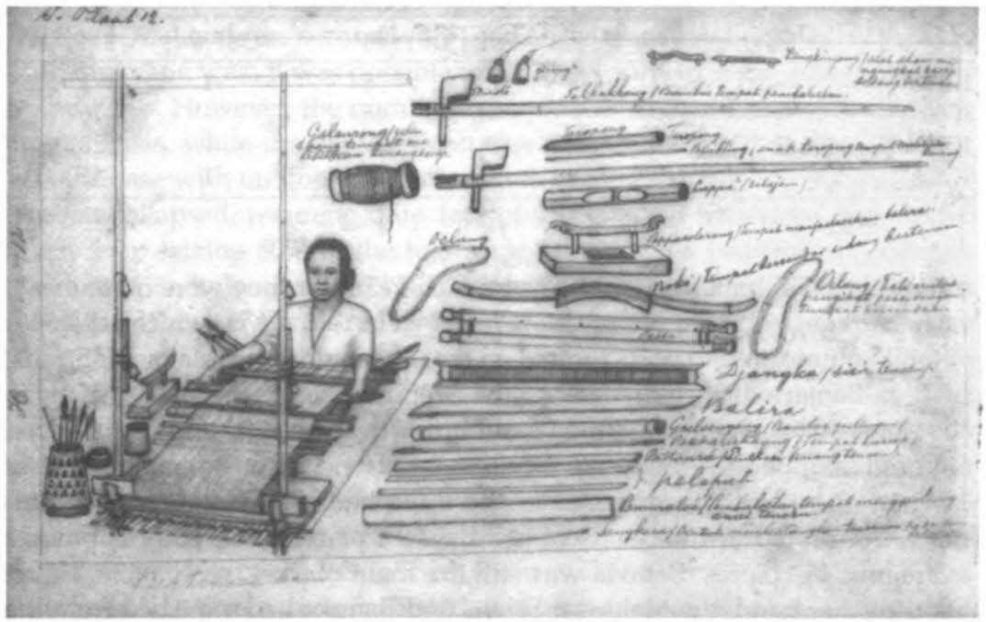
The next commodity group is completely made up of textiles from China. It will be no surprise that this trade in Chinese cloth, Chinese linen and woven silk by the roll, only became important towards the end of the century, when the Chinese commercial role was so strong. The label 'Chinese cloth' covers something of a residual category. It seems that most of these were imitations of Indian textiles, so we find Chinese *gingams*, chintzes and *cauls*, although it is not at all certain that the last was really from China (Table T). This residual category was only traded on a small scale. The same applied to woven silk, including damask and satin. The export surplus of woven silk that appeared in the 1780s is still hard to explain.

Table 22. Annual average private sector imports and exports of Chinese cloth, Chinese linen and woven silk (rounded-off)

	Chinese cloth (100 pieces)		Chinese linen (100 pieces)		Woven silk (rolls)	
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
1720s	-	-	-	-	5	-
1760s	-	-	4	2	8	-
1770s	-	4	15	19	-	2
1780s	17	9	46	59	19	41

Linen, whether coarse or fine, came from China, mainly from Nanking (*Verhandeling* 1786:334). Most was white, but sometimes yellow, blue, green, red or black also occurred. Nanking linen was strong and durable and yet finely woven and shiny (Jörg 1982:83; Laarhoven 1994: Appendices 45). In the Makassar market of the 1780s it was mainly a transit-item. Annual incoming shipments, corrected for double-counting of skippers, numbered a little over 3, averaging 1,373 pieces. About 96% of these imports were by way of Amoy and all skippers were Chinese. For outgoing linen a totally different picture emerges. There were on average almost 88 loads of only 67 pieces. Just under 40% of shipments went to Sumbawa and almost 30% to Buton. In so far as the total volume of exports was concerned Buton, with 36%, took the lead, leaving Sumbawa behind with 30%. About 40% of skippers were Chinese, about 25% Malays and approximately 15% Company's Subjects. However, measured in share of the export volume, the order was somewhat different. Then the Chinese took 37%, the Chinese Peranakan 21% and the Malays 16%.

In Table 23 we turn to domestic cloth production. Here all Sulawesian textiles are grouped together, in so far as they were not finished products such as blouses or trousers. This category includes first, Buginese cloth, namely that which was produced in Buginese speaking areas, such as Bone and Wajo, and, second, cloth from the southern island of Selayar. A third category covers all other Sulawesian textiles, for instance from Makassar, Mandar or Buton. Buginese cloth was known for its checks (Liedermoij 1854:361), whereas Selayar's cloth, white and blue, was both striped and checked (Heersink 1995:39-40). As in the case of Chinese textiles, there appears to be some imitation of Indian sorts, for the harbourmasters sometimes record Selayar as well as Makassarese *gingams*. Originally, *gingams* were striped cottons from Coromandel and Bengal (Laarhoven 1994: Appendices 28-30). These adaptations reveal changes in the taste of the Sulawesians themselves, with local producers responding to new demand. In VOC circles, however, it was said that Sulawesians were rather conservative in their clothing habits. By the 1760s this conservatism was given as an excuse why consumption of Indian cloth brought in by the VOC was so meagre. Moreover, it was said that the Sulawesians did not like the large sizes and found the colours unattractive and prices too high (VOC 3243-3:77-8).
Most Sulawesian cloth only appears as exports in the harbourmasters' records,



KITLV, OR 545, 184, plaat I 12: a woman weaving, including all her instruments

so it must have entered the port by land or on local ships. The general development of exports was as follows. In the beginning of the century exports numbered about 5,000 pieces per annum, mainly of Buginese textiles. By the 1770s it had grown to 12,500, mainly as a result of the growth of Selayar's cloth trade. This increase in commercial production is borne out by the rising imports of raw cotton during this period. But from about 1780 exports dropped again to about 7,500 pieces; the reason for this decrease is unclear. At first sight one might think of increased competition in overseas markets, against, for example, a commodity such as Chinese linen. However, this is difficult to prove considering that Chinese linen went to Makassar's southern hemisphere, whereas prior to 1780 this area, with the occasional exception of Buton perhaps, had hardly been a market for Buginese or Selayar's cloth. Another explanation for the decrease might be the recovery of Indian cloth imports, which will be discussed later, or, simply, export through other Sulawesi ports of those textiles which once went via Makassar.
Buginese cloth was a rather popular export. On average, during the 1720s

Table 23. Annual average private sector imports and exports of Buginese, Selayar and other Sulawesian cloth, in 100 pieces (rounded-off)

	Buginese cloth		Selayar cloth		Other Sulaw. cloth	
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
1720s	–	42	2	8	1	1
1760s	–	59	–	48	–	16
1770s	1	48	–	59	–	28
1780s	–	46	–	17	1	11

more than 54 shipments left Makassar each year, but they were quite small, each averaging only 78 pieces. Most loads went to Batavia, which took 51% of total volume, and to ports located on the other side of the Makassar Straits, such as Banjarmasin, with 14% of the volume, and Pasir. Distant Bangka absorbed 10%. Wajorese skippers dominated with 62% of the turnover, although skippers of unknown ethnicity also held a considerable share of 19%. By the 1760s the character of the trade had totally changed, becoming concentrated in the hands of just over 12 participants with shipments averaging 481 pieces. Batavia was still the main market, with a 62% share. On the other hand, the Makassar Straits and Bangka had vanished from the records. Instead, Maluku, especially Ambon, had become a major consumer, taking about 34% of total exports. It is difficult to establish a clearly dominant ethnicity among the outgoing skippers. The Chinese Peranakan had reached some prominence with 27%.

From about 1770 onwards Buginese cloth exports declined slowly, although this was not yet reflected in the number of shipments, which tended to remain stable at a little over 13. However, average loads dropped to 362 pieces. Batavia held its ground as a destination, with 67% of volume. The slow-down in sales was most visible in Ambon, the share of which dropped to 10%. On the other hand, the 1770s saw a revival of Sulawesian participation in the trade, with Buginese skippers capturing 48% of volume and a few Wajorese 21%. However, these Sulawesians were no longer the small carriers of the 1720s, as they traded in bulk. During the 1780s annual numbers of shipments declined to almost 8, while the average load size tended to rise again, towards 600 pieces. Now the general slow-down could be ascribed to Batavia's share of exports dropping to 47%. Maluku, in this case Ternate, Banda and Ambon together, recovered, with 44% of the market. This change was accompanied by a weakening of Sulawesian skippers' roles. Buginese carried only 31%, while the Chinese and the Chinese Perakanan profited, having 23 and 20% of the market, respectively.

Selayar's cloth, in so far as it was shipped by way of Makassar, only became important in the middle of the century. In the 1760s it was traded on a relatively large scale, with an average of 10 shipments per year of 480 pieces. Ambon was the main market, claiming 63% of total export volume, followed at a long distance by Buton with 14%. Chinese skippers, with 41%, dominated the trade. Malays were second with 17%. As Selayar remained largely outside the Sangkilang wars it was possible for 1770s exports to climb a bit compared to the 1760s. However, the number of shipments declined, to a mere 8 on an annual basis, while the average load size rose towards 739 pieces. Then, as was the case with outgoing Buginese cloth during this period, the market in Ambon collapsed, retaining only 16% of sales. In the meantime, Buton had taken over, seizing 80% of the total export volume. A handfull of Wajorese dominated, sailing out with 39% of Selayar's cloth, with a few Buginese trailing at 21%. After 1780 the trade in Selayar cloth declined again.

Table 24 summarizes Makassar's textile imports from other areas in Indonesia, such as Bali, Sumba and Java, and also those from the Indian sub-continent. Cloth brought in from other areas in the Archipelago was never important, in contrast to the crucial role played by Indian imports. In the beginning of the century private sector imports of Indian cloth exceeded 10,000 pieces, more than double those of the VOC. Then, in the middle of the century, the private sector's Indian textile trade collapsed, with incoming levels falling to between 2,000 to 3,000 pieces per annum in the 1760s and 1770s, which was even less than the VOC's, namely some 3,500 pieces (see pp. 38-41). There are three possible explanations for this decline. First, the supply from India was smaller, owing to wars and the increased English grip on trade in the sub-continent.

Second, more cloth was being bought from English country-traders through alternative trade circuits which were outside VOC control. A report of 1768 stated that this was the case, although there is no information whatsoever as to the extent of this phenomenon (VOC 3243-3:75-7). Third, textile production in Sulawesi itself may have increased. Table 23, as well as raw cotton imports shown in Table 21, testify that domestic production must have accelerated in these years. After 1780, however, a partial recovery for incoming Indian cloth is evident. To some extent, this was due to a decline in the VOC's own imports, which were only about half those of the pre-1780 decades (see p. 41). Re-export remained important. But since the import surplus of the 1780s was about 4,000 pieces annually, the Sulawesi market for Makassar's Indian textiles seems to have been less than half that of the beginning of the century.

Table 24. Annual average private sector imports and exports of Indonesian non-Sulawesian cloth and Indian cloth, in 100 pieces (rounded-off)

	Indian cloth		Indonesian cloth	
	Imp.	Exp.	Imp.	Exp.
1720s	109	6	3	-
1760s	20	18	1	-
1770s	32	14	8	6
1780s	77	30	5	1

In the 1720s the annual number of incoming shipments of Indian cloth was quite high, almost 106, though average loads were fairly small, at 103 pieces. As in the case of crockery, skippers often carried different types. In fact, on an annual basis, there were only 26 real skippers involved in the trade, with average shipments of 419 pieces. Unsurprisingly, 100% of volume came in from Batavia, the emporium of the VOC. There, the VOC itself sold much of its own supply of Indian cloth, imported under monopoly regulations. Private merchants could re-export again, once the cloth had been given a VOC-stamp (Laarhoven 1994:170, 235). The skippers dominating Makassar's imports in the early decades of the eighteenth century were not Burghers or Chinese, but Wajorese who carried 71% of the total volume of imports.

Looking at the types of cloth imported during the 1720s, it is obvious that the VOC and the private sector were more or less complementary (see p. 39), so competition between them must have been limited. The first five private sector imports, measured in annual average number of pieces, were the following: 6,788 *gerasses*, 2,075 chintzes, 775 *sologesies*, 605 *cassas* and 150 *salempores*. *Gerasses*, by far the bulk of the imports, were relatively cheap plain cotton cloths from Bengal, measuring between 13.5 and 34 metres in length. The VOC hardly brought these in. Moving to the second item, the VOC did

import chintzes from Surat, beautifully patterned cottons and silks varying in length between 2.5 and 28 metres (Laarhoven 1994: Appendices 18, 28), but the private sector's turnover appears to have been much higher. *Sologesies* (also called *epos*) and *cassas*, were again hardly imported by the VOC in this period. The former cloths, from Surat or Bengal, were cottons of an as yet unclear size, while the latter were cotton muslins from Bengal, varying in size between 8.5 and 27.5 metres (Laarhoven 1994: Appendices 15, 59, 61, 62).

By the 1760s the average annual number of shipments and load sizes of incoming Indian cloth had greatly declined, at only 28 of no more than 72 pieces. Corrected for double-counting of real skippers the number was a little over 11 and the average load 179 pieces. In the 1770s there appeared to be some recovery, at least in average shipments, a little over 21, and in load size, namely 151 pieces. Corrected for double-counting, the number was 10 real skippers, with 322 pieces. Batavia was still their source for these textiles. However, in contrast to the beginning of the century, by the 1760s Sulawesian skippers were conspicuously absent, the trade being dominated by Chinese and Chinese Peranakan, with 23 and 34% of total volume. This was totally reversed again in the 1770s, with Buginese skippers taking 61% of imports, leaving the Chinese far behind with only 16%. In the 1760s the two most important types were: chintzes, mainly from Surat and to a lesser extent from Coromandel, with an annual average of 768, and *cassas* from Bengal with 730 per annum. The rest were negligible. In the 1770s the order in the annual average imports was: chintzes with 1,197, *cassas* 587 and *karikams* 520. The *karikams* were plain cottons, usually red, 6 metres long at most, sometimes from Surat, sometimes from Coromandel (Laarhoven 1994: Appendices 38). In so far as the private sector did import chintzes and *cassas*, they brought in more than the VOC. However, the observation that the two sectors were complementary rather than competitive remains valid (see p. 40). The main contrast with the beginning of the century was the virtual absence of *gerasses*.

The 1780s recovery of the private sector's Indian textiles imports produced almost 29 shipments per annum, averaging 269 pieces. But there were only 13 real skippers involved, with average loads of 594 pieces. Batavia continued to be the source. However, Sulawesian skippers had lost this trade for the second time as the Chinese skippers' share in incoming volume had grown to 52%, followed by 16% of skippers of unknown ethnicity. The most important types of cloth were, on an annual average basis: chintzes with 3,526, *cassas* 2,167, *baftas* 367, *karikams* 320 and *guinees* 272. The *guinees*, plain white cottons of 34 to 47.5 metres, were by then the only cloth in which the VOC still traded on a large scale. *Baftas*, plain cottons of 6.5 to 15 meters, had only been of importance to the VOC in the early years of the century (Laarhoven 1994: Appendices 5, 6, 32, 33; see pp. 39, 41).

The situation was very different for private re-exports of Indian cloth

during the 1780s. Shipments numbered 56 per annum and averaged only 54 pieces. These exports were carried by a little over 38 real skippers, carrying on average an unimpressive 79 pieces. About 34% of these exports was destined for Buton, 25% for Sumbawa and 21% for Bonerate. Malay skippers carried about 31%, Chinese skippers 24% and Company's Subjects 20%. The most important types for export were, on an annual basis: chintzes with 1,639, *salempores* 327 and *baftas* 323. The *salempores*, plain cottons of 13.5 to 21.5 metres, might have been bought from the VOC in Makassar (Laarhoven 1994: Appendices 55). A comparison between imports and exports according to type shows that about half the chintzes were for re-export, but that *cassas* were entirely meant for Makassar's home market.

Slaves are the last commodity discussed in this general overview. It is difficult to obtain a consistent picture of Makassar's slave trade from the harbourmasters' records, as there were periods when it was totally omitted from the statistics. In the course of two centuries the VOC tried to control this trade by introducing regulations and licenses, partly because there seem to have been various abuses. In 1685 the High Government had already forbidden the import of Sulawesian slaves older than twelve into Batavia. Adults were deemed to be 'rebellious', as most were born free, then kidnapped and sold as slaves. In 1728 it was again observed that many of the slaves sold in Makassar were either stolen from somebody else, or free people who had been simply enslaved by local power-holders (VOC 700:192-3; VOC 2133-2:45-6). By 1746 the 'stealing' of slaves had become such a widespread phenomenon that the VOC required every inhabitant to have written proof that the slaves he or she claimed had been legally obtained (VOC 2674:336). All these regulations made the slave trade special. From about the same period, the mid-eighteenth century, the VOC itself started to buy slaves in Makassar for its Batavia work-force. Slaves for the VOC were exempt from export duties in Makassar (VOC 2606:22; VOC 2628:419; VOC 3760:7).

Since the middle of the eighteenth century merchants could contract to supply slaves for the Company, receiving half of the payment in Makassar and half on handing over the cargo in Batavia. The first record of such deliveries dates from 1752 and lists 200 slaves, 110 of whom were to be supplied by 6 Burghers, 60 by 3 Malays and 30 by 1 Chinese. The biggest contractor appeared to be the Burgher Adriaan Voll. One year later, in 1753, the quota was raised to 270 slaves, 200 males and 70 females. All but 10 of these were contracted for by Burghers (VOC 2799:28-9; VOC 2818:19). In 1756, the VOC requirement was for 500 slaves, 130 of whom were female. However, from this year on the demand started to decline (VOC 2883:38-9; VOC 2908:39, 119). In the meantime, the concentration of slaves required extra regulations to ensure nocturnal security in the town. How serious the situation could be

was demonstrated in 1759, when there was a successful mutiny among the more than 50 slaves on board the Batavia-bound *chialoup* of the biggest slave trader of that year, the Burgher Simon Burggraaf. Consequently, it will come as no surprise that in the private accounts of Jacob Bickes Bakker one comes across payments for blacksmiths in Batavia to free the slaves from the chains on board (VOC 2964:24, 254-5; Koopmansboeken 16:20-3-1767).

Table 25 below summarizes the slave trade of Makassar. Unfortunately, the harbourmasters' registers give no information on this for the year-blocks of the 1760s and 1770s. For these years the only information on the slave trade is found in the contracts for delivery to the VOC. In 1766 140 slaves were supplied by 8 Burghers, in 1767 150 by 12 and in 1768 150 by 14 Burghers (VOC 3181:33; VOC 3210:26; VOC 3243:21-2). In 1768 and 1769 the earlier mentioned Simon Burggraaf and Barend Jansz were among the contractors; both were business partners of Jacob Bickes Bakker (VOC 3243:21-2; VOC 3273:51; Koopmansboeken 16:31-12-1769). From the latter's private administration it appears that in 1769 both Simon Burggraaf and Barend Jansz carried on average about twice as many slaves as their VOC contracts specified, which meant that they were also supplying Batavia's private market. In Batavia they had to pay various duties to the harbourmaster and the tax farmer. Burggraaf made a net-profit of about 40%. Jansz, however, did much better with a net-profit of 130%, as he seems to have bought cheaply and to have sold rather well. Of his 26 slaves, 22 were male and 4 female. Women were about three times as expensive as men. Of the slaves 8 came from Bugis, 7 from Makassar, 4 from Mandar, 3 from Sumbawa, 2 from Kaili, 1 from Bantaeng and 1 from Manggarai (VOC 3273:51; Koopmansboeken 16:9-12-1769, 31-12-1769). The contractors' lists for VOC delivery in 1774, 1775 and 1776 record quotas for 300, 300 and 285 slaves by 20, 21 and 22 Burghers, respectively (VOC 3412:17; VOC 3441:19-20; VOC 3465:30).

It might be useful to know that for the years 1766-1769, the Daghregister Batavia shows an annual average of about 400 slaves coming in from Makassar (VOC 7617:175-84; MDB 4942-4, 4957-8). For the years 1774-1777 the average was about 550 (MDB 5040-3, 5064-6, 5081-2, 5101-4). However, the Daghregister was probably heavily under-registered; it would be no surprise if actual imports were about 50% higher.

Table 25. Annual average private sector imports and exports of slaves (rounded-off)

	Slaves	
	Import	Export
1720s	266	99
1760s	-	-
1770s	-	-
1780s	807	1,168

During the course of the century, the prohibition on importing slaves above the age of twelve from Makassar into Batavia seems to have been easily forgotten. To curb excesses in the trade, in particular of old and disabled persons, the High Government made a new attempt to restrict imports by forbidding the trade in slaves over twenty-five. In 1782, this edict was reiterated (VOC 812:365-6). In that same year, a group of slave-trading Burghers from Makassar complained that prices in the market had gone up so much that delivery to the VOC was no longer profitable. Besides payment for the actual slave, which happened to be rather high during this period, the Burghers also had to take into account costs for currency conversion, administration fees, victuals and guards on their ships. Moreover, there appeared always to be a few VOC employees who could pay just a little bit more for a slave, hence driving up prices. To improve the situation, the Burghers requested a small rise in prices, payment in proper currency, prohibition on slave trading by VOC personnel and exemption from administration fees. Unfortunately for them, the local government was not only unimpressed by their arguments but denied their truth. This position was strengthened by the fact that most of the complainers in the meantime had contracted for further deliveries under the old conditions, undertaking to supply the VOC with 255 slaves. Nonetheless, the High Government in Batavia decided the following year to lower administration fees. Moreover, it was stipulated that nobody was allowed to export slaves before the VOC's suppliers had fulfilled their obligations (VOC 3623-2:83-9; VOC 3648:4-5, 7-8).

For 1786, 1787 and 1788 the annual contract quotas for the VOC were 184, 200 and 200 slaves, respectively, divided among 14, 12 and 12 Burghers. The biggest contracts were usually taken out by widows; in 1786 it was the widow Martinie with 30 slaves and in 1787 the widow Jansz with 26. In 1788 the biggest contingents were for two contractors, each promising 28 slaves: the widow Routier and Jan de Siso (VOC 3732-2:86-7; VOC 3760-4:95; VOC 3809:60-1). In the beginning of 1789, the Makassar government prohibited deliveries by widows or by merchants who did not sail themselves to Batavia. It appeared that non-skipper-owners had their slaves carried in small groups by others, a cause of confusion and irregularities both on board and in Batavia, in particular when slaves died. The treatment of slaves on the ships was often bad, many travelling in chains, which led the Directors of the VOC in the Netherlands to observe that the local government in Makassar should do more to further humane treatment (VOC 3858:32; VOC 3959:56-9).

The most complete picture of the slave trade comes from the harbourmasters' records of the late 1780s, which showed an annual export surplus of about 350. Slaves were brought in by almost 67 skippers per annum, carrying on average 12 people each. More than 25% of the shipments came in from Buton, another 20% from Sumbawa. However, volume share was as follows:

Ende 42%, Bugis 20%, Buton 16% and Sumbawa 10%. The Malays were the biggest importers, taking 48% of the turnover, mainly with slaves from Ende. They were followed by Chinese with 18% and Company's Subjects with 17%. Ende's dominance of supply and Malay skippers of transport had not existed early in the century. The 1720s statistics showed that about 32% of imports originated from Sumba, followed by Sumbawa with 18 and Ende with 17%. Skippers of unknown ethnicity, in all probability Sulawesians, carried 51% of slaves, with Malays in second place with 14%. The growing imports from places like Buton and Bugis might be an indication that during the course of the century eastern Sulawesi became increasingly important as a source of slaves. The area had a long tradition of raiding. The same is probably true for a place such as Ende. In the beginning of the nineteenth century it was reported that Malay and Buginese traders were active in the export of slaves, which were obtained from the interior of Flores and from Sumba (Veth 1855:165; Velthoen 1997:370, 374). Consequently, a part of Ende's success in the course of the eighteenth century might be explained by it becoming a transit port for Sumba's slave exports.

Exports during the 1780s were carried in almost 51 shipments per annum, averaging 23 people. Slaves were sometimes differentiated according to gender, but generally the division into males, females and children is unclear. However, the distinction between VOC slaves, slaves 'on order' and slaves for *negotie* or 'trade' was administered more consistently. The ratio between slaves for the VOC and for the free market, namely those 'on order' and 'trade' combined, appeared to be roughly 10 : 90. If the annual number of shipments is corrected for double-counting of real skippers, it becomes almost 34, each typically carrying 35 slaves. Not surprisingly, exports were generally Batavia-bound; the capital of the VOC absorbed 91% of all slaves from Makassar. Most were handled by Burghers, followed at a great distance by Chinese, with respective shares of 63 and 17%. The slave trade had thus become the last commercial niche for the Burghers of Makassar.

Between 6 and 8 skippers per year transported slaves for the VOC to Batavia, so almost half of the contractors sent their slaves with another person. The average number of slaves destined for the VOC on one ship was 30. However, the same skippers also carried slaves for the free market, on average 72, giving total shipments of 102 slaves. The maximum number on board one ship in the years 1786-1789 was realized by Willem Philippus Hodenpijl, who made one voyage with the tremendous number of 177 slaves. Second and third were more regular slave-carriers, namely Axel Anthonij Rosenquist, with 163 and the already mentioned Jan de Siso, with 143 slaves. Besides the considerable number of slaves, such ships, usually *paduwakang*, sailed with an average 28 hands. This is well above the general crew average for the entire private sector (Table F), no doubt because

of the need to feed and guard the slaves. Consequently, all together there were about 130 persons on board and, since these ships were no bigger than approximately 10 *last*, one wonders how it was possible to cram them all on board. It must have been terribly crowded, with conditions comparable to those on the Atlantic slave route. In this respect, the remarks of the Directors in Netherlands noted above, urging Makassar's government to do more to improve the lot of Batavia-bound slaves, were probably more necessary than they themselves might have realized.

Summary

In the 1720s the private traders of Makassar imported large quantities of Indian cloth from Batavia, Javanese tobacco and salt from Semarang, rattan from Pasir, coconuts from Kaili and paddy and rice from Bima. Notable exports were paddy to Kaili, salt to Ambon and rice to Ambon and Banda. Bulk trade, for instance with loads of 200 *pikul* or more, only occurred on individual ships with salt imports and rice exports.

Totally different incoming and outgoing cargoes dominated the private sector of the 1760s. Indian cloth, Javanese tobacco, salt, rattan and paddy were no longer important. Rice exports had also collapsed. Large volumes of arrack were now coming in from Batavia, rice and raw cotton from Sumbawa, trepang from Bonerate and coconut oil from Ende. Trepang and agar-agar were going out to Batavia and *picis* and rixdollars to Sumbawa. Bulk on individual ships, with loads of more than 1,500 cans of liquid materials or 200 *pikul* in weight, were only visible in arrack imports and trepang exports.

By the 1770s the number of high-quantity imports had declined somewhat, now being only arrack from Batavia, trepang from Buton and coconut oil from Ende. The exports, however, showed great continuity with the 1760s, comprising mainly agar-agar and trepang to Batavia, trepang to Amoy, *picis* and rixdollars to Sumbawa. Bulk cargoes were incoming coconut oil and outgoing trepang and agar-agar.

The most lively period was the 1780s, with much arrack, Indian cloth and iron coming in from Batavia, Javanese tobacco from Semarang, rice and raw cotton from Sumbawa, trepang from Buton and coconut oil from Ende. Outward-bound were agar-agar and slaves for Batavia, trepang and rattan for Amoy, rixdollars for Semarang and Sumbawa and, finally, bowls and plates for Sumbawa. Arrack and coconut oil were imported in average quantities of more than 1,500 cans, while the Amoy junk brought in bowls and plates, separately as well as in sets, in loads of more than 20,000 pieces. The Amoy junk was also the reason that Chinese linen was the only textile imported in average loads of more than 1,000 pieces. On the export side bulk

loads on individual ships, for instance of more than 200 *pikul* or 500 bundles, were on average realized in the cases of agar-agar, trepang and rattan.

Three general trends should be stressed for Makassar's private trade. First, the gradual change from being a port for exporting local produce, in particular rice, to becoming a gateway for transit trade, exchanging in particular marine and forest products for Chinese manufactures, which entered Makassar in bulk. Second, a clear growth in the volume of trade after 1780, caused by an intensification of the Amoy connection and, to some extent, the decline of the VOC's own trade. Third, also towards the end of the century, there was an increasing concentration of merchandise volume in the hands of Chinese skippers. This 'Sinification' took place to the detriment of Sulawesians and Europeans, both VOC and Burghers.

CHAPTER V

Case studies in trade
Value, routes, ethnicities, skippers

In the preceding chapter we considered Makassar's cargoes and commodities, looking at the composition of loads, origins and markets, and what sorts of skippers carried which goods. Having established this broad structure, we will now examine specific characteristics of Makassar's commerce. First, the focus shall be on the value of trade and then route and ethnicity will provide the criteria for a further analysis of the flow of goods. Particular attention will be paid to voyaging with or without commodities and diversification of the cargo. In order to carry out the analysis on the basis of value many assumptions have had to be made. Thereafter, the principal routes and ethnicities will be studied in detail, stressing the characteristic products found on board. The Amoy connection, which had a great impact on trade and was entirely the domain of Chinese merchants, receives special emphasis. Finally, the cargo composition of two samples of skippers, each comprising several individuals, will be studied in order to obtain additional insight into the behaviour of skippers in the 1720s and 1780s.

The value of trade in the private sector

Table U gives early and late 1700s price estimates for the products discussed in the preceding chapter. Sources, primarily the VOC records and the private administration of Jacob Bickes Bakker, sometimes included information on free market prices. In Table U these are entered without further comment. However, if free market data were not available, VOC sales prices and/or the value for which such a commodity was booked in its accounts were used instead; such cases, which occurred rather frequently, are noted explicitly. If more than one price was available an estimate was made as to what was most likely. When for one period the information on a certain product was lacking altogether, estimates were made on the basis of comparison with another

period or by comparing prices with related products. Of course, in reality prices varied more than is shown in Table U. Nevertheless, the estimates give a useful picture which can provide a point of departure for an analysis of relative value.

It is clear from Table U that some of the commodities selected for analysis were extremely costly, exceeding 100 rixdollars per unit, while others were quite cheap, under 0.5. Cheap products included palm sugar per ball, rattan per bundle, paddy and salt by the *pikul*, coconut, bowls and plates – single as well as in sets –, bush-knives and knives, Butonese chests, Buginese and other Sulawesian cloth by the piece and, finally, arrack and coconut oil by the can. Among the expensive commodities were karet and birds' nests as well as opium and raw silk by the *pikul*. If the annual average quantities of each commodity, as discussed in the previous chapter, are multiplied by the prices of Table U, it predictably appears that cheap items were commercially not very significant. The trade value of some of them, for instance, palm sugar and coconuts, was so negligible that it almost seems that they were only taken on board as ballast, or at the most for filling empty space.

During the 1720s, according to Table 26 below, the most important recorded incoming items were, according to annual average calculated value, Indian cloth with almost 22,000 rixdollars, Javanese tobacco with 18,500 and Chinese tobacco with 13,500 rixdollars. The most important export was rice at 19,500 rixdollars. In the harbourmasters' records slaves were only significant as imports. As we have explained in the previous chapter, there was an obvious under-registration of their export and to compensate for this it has been assumed in Table 26 that outgoing slaves numbered about 375 or 140% of the imports, which is more or less in line with the situation after 1780, when the slave trade is best documented. Another problem was that rixdollars carried on board were not listed in this period. Therefore, it has been assumed that about half of the rice exports were paid for in cash, totalling about 10,000 rixdollars. At the same time we have estimated that about half of this amount of rixdollars was re-exported.

At the end of the 1760s, the most significant incoming items were trepang, worth almost 42,000, and Chinese tobacco, at 30,000 rixdollars, while outgoing trepang led again with about 78,000 rixdollars, followed by rixdollars with over 13,000. In the 1770s the picture was the same, with import leaders being trepang with 44,000 and Chinese tobacco with 30,000 rixdollars, and trepang and rixdollars as most valuable exports at almost 103,000 and 24,000, respectively. In both of these multi-year blocks there were no registered slaves. It has been assumed here that Makassar's slave exports were 600 and 800 slaves for the 1760s and 1770s, respectively, or about one-and-half times the under-registered imports from Makassar according to the Batavia Daghregister (see p. 117). Furthermore, to parallel the 1780s situation,

the level of imports into Makassar itself has been put at two-thirds of the assumed level of exports. Finally, from Table 26 it is obvious that the 1780s showed the most lively trade, with incoming values being 67,500 rixdollars for trepang, 48,500 for the now registered slaves, 34,500 for Indian cloth and 32,500 for Chinese tobacco. Outgoing values were 173,000 for trepang, 70,000 for slaves and 45,500 for rixdollars.

Table 26. Estimated annual average value of the principal private sector commodities, in rixdollars

	1720s	1760s	1770s	1780s
Imports				
Rixdollars	10,000	7,500	8,500	5,000
Rice	2,500	10,500	9,000	16,500
Tobacco, Chinese	13,500	30,000	30,000	32,500
Tobacco, Javanese	18,500	4,500	7,000	19,000
Trepang	500	42,000	44,000	67,500
Cloth, Indian	22,000	8,000	13,000	34,500
Slaves	11,000	20,000	26,500	48,500
Exports				
Rixdollars	5,000	13,000	24,000	45,500
Rice	19,500	2,000	2,000	1,000
Tobacco, Chinese	-	1,500	3,000	5,000
Tobacco, Javanese	-	-	-	2,500
Trepang	3,500	78,000	103,000	173,000
Cloth, Indian	1,500	7,000	5,500	13,500
Slaves	15,000	30,000	40,000	70,000

The conclusions which can be drawn from Table 26 are as follows. In the beginning of the century, imports of tobacco and Indian cloth were exchanged for exports of rice and slaves. From about the middle of the century the pattern was that of incoming trepang and tobacco, now mainly Chinese, set against outgoing trepang and slaves. Of course, trepang was essentially a transit item. Since both trepang and slave exports showed accelerated growth towards the end of the century, other products were also necessary in greater quantities to keep some kind of balance of trade. Consequently, more slaves had to be brought in and more rixdollars had to be sent out to pay for the popular transit items.

These conclusions require some further comments. First, there is no doubt that the transformation of Makassar's maritime trade was mainly caused by the intensification of the China connection. Trepang was the leading commodity in this structural change. Much in demand in China itself, trade in

trepang multiplied about sixty-fold within less than a hundred years. Second, the slave trade, with a five-fold expansion, was a rather constant phenomenon and a very substantial element in the link with Batavia. Third, a remarkable feature was the important and constant role of tobacco, in particular in imports. The relatively expensive variety from China appears to have captured the lead. Fourth, the Indian textile trade was rather unstable, declining towards the middle of the century and recovering towards the end. To some extent, Indian cloth was re-exported. The value of these re-exports usually exceeded those of the exports of indigenous Sulawesian cloth. It appears that for re-export, at least from about 1770 onwards, products like Chinese linen and raw silk were more important than Sulawesian cloth.

Previously (see p. 35) it was estimated, on the basis of the annual cost of the VOC's customs farm, that the total value of private trade in Makassar around 1770 was about 375,000 rixdollars and 500,000 towards 1790. Table 27 shows the results of an attempt to establish the total value of trade on the basis of the estimated prices and average volume of the most important products (Chapter IV; Table T, U). The total of the outcome for import and export combined has been multiplied by 1.25 to take into account all those lesser commodities which were not selected for analysis and which usually comprised 20% of the total number of loads. In the 1780s, it was somewhat higher, namely 23%. However, in these years the share of the category of *kleinigheden*, 'small things', among the not selected merchandise was also higher than in other year blocks. This relatively high share of *kleinigheden* was the reason for retaining the factor of 1.25 for the 1780s as well.

Table 27. Estimated annual average total value of private sector trade and average value per volume of shipping, in rixdollars

	Selected commodities				
	Import	Export	Total	Total incl. non-selected commodities	Average value per *last*
1720s	94,000	51,500	145,500	182,000	48
1760s	180,500	173,000	353,500	442,000	137
1770s	204,500	241,500	446,000	557,500	170
1780s	357,500	410,000	767,500	959,500	176

Table 27 indicates that the previous estimate for the second part of the eighteenth century using the customs farm was far too conservative. Taking into account a certain amount of under-registration, it could be said that around 1770 the total value of trade must have been about 550,000 and towards 1790 more than 1,000,000 rixdollars. Given the fact that the gap between imports and exports was rather large in the 1720s, it might be assumed that under-

registration was then somewhat higher than later and that the value of the entire trade was about 250,000 rixdollars. Before the 1770s Makassar seems to have had an import surplus, however, thereafter an export surplus emerges. The average value of trade per *last* showed a continuous growth from about 50 rixdollars in the 1720s to 170 in the 1770s, after which stabilization seems to have set in.

Although the basis for these calculations has, of necessity, included some rather heroic assumptions, it is nonetheless worthwhile to consider their implications. The preceding data suggest that from about 1725 to about 1790 total private trade in Makassar showed an annual compound growth rate of 2.7%. For imports and exports, the figures were 2.1 and 3.3%, respectively. Before the end of the 1760s the general growth rate was somewhat lower than for the entire century, namely 2.1%, but after that the pace accelerated to about 4.0 per annum. This was a rather good result, which also compares quite favourably to the conclusion on the volume of private shipping (see p. 68; Table 7), which only showed a compound growth rate of 0.6% from 1725 to the late 1780s. Up to the 1770s shipping volume had even showed a decline. Then it started to grow again, at a pace of 2.6%. Consequently, it might be concluded that prior to about 1775 or 1780 the growth of trade was facilitated by a more economic or efficient use of space on board the merchant fleet. Total capacity of the fleet remained at a rather constant level. The figures for average value per *last* in Table 27, which showed growth before about 1770, are proof of such a conclusion. However, by about 1775 or 1780 the possibilities for economizing on space seem to have been exhausted, so further growth in trade could only be realized by expanding the capacity of the fleet. This explains why the volume of shipping increased again in the 1780s.

Private shipping, trade and routes: general characteristics

Earlier we concluded that the chance of obtaining a significant cargo greatly increased during the course of the century (see p. 82), which is in line with the above section on value. How this trend was realized on the different routes can be seen in Table V.

Of Makassar's nine principal routes of the 1720s six showed relatively 'poor' opportunities for sailing with cargo, as 30% or more of journeys were made with no commodities listed. Semarang and Kaili, respectively, scored more than 40 and about 70% cargo-less outgoing voyages. Sumbawa and Bima were even weaker in performance, both on incoming and outgoing trips. Sumbawa had about 50% of vessels empty on arrival and more than 85% on departure. For Bima, these figures were more than 60 and more than 90%, respectively. It could be that these skippers were gatherers of sea

products, which were badly registered in this period (see p. 24-7). In the case of Ambon and Banda, it was mainly incoming ships that sailed without cargo, in 100 and 90% of cases, respectively. These are very substantial scores indeed. It is clear, however, that incoming vessels from Ambon and Banda arrived with considerable amounts of cash. Skippers from Maluku used to carry stones for ballast, which the VOC required them to dump on the beach near the Company tollhouse in Makassar, so that it could make use of them. However, many skippers used to throw their ballast overboard before entering the roadstead, to the irritation of the Makassar authorities (VOC 1623:176-7; VOC 1676:136).

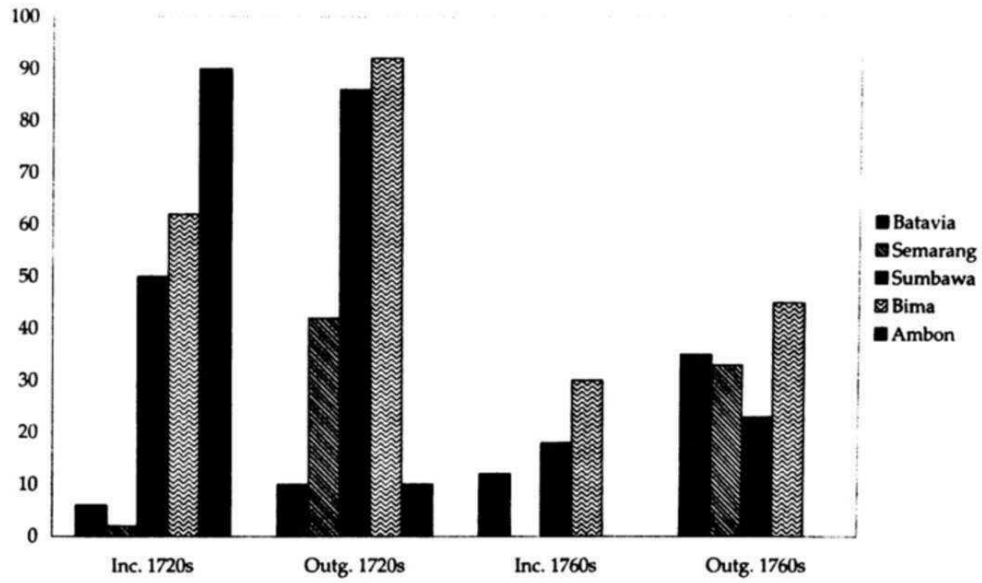


Figure 2. Annual average percentage of ships sailing without cargo in the 1720s and 1760s for Batavia, Semarang, Sumbawa, Bima, Ambon

The cargo situation had improved considerably by the 1760s, with only one principal route on which both incoming and outgoing ships sailed empty in more than 30% of cases. This was Bima, with about one-third of the vessels carrying no merchandise on arrival and about 45% on departure. In fact, Bima appeared to be the only place with such an incoming score. For outgoing ships, however, there were still three destinations with poor tallies, namely Bonerate with over 80% and Semarang and Batavia with levels of about one-third. That Bonerate was included is no surprise, as fishing and hunting/gathering to obtain commodities was quite common around and

beyond this remote and sparsely inhabited rendezvous. In the 1770s the degree of loading had increased further, with only one destination left for which the no-merchandise category exceeded 30%. This was Batavia, showing emptiness in almost 40% of the outgoing traffic. However, closer examination of these empty vessels in the 1760s and 1770s shows that most were skippered by Burghers, recognizable by name as being among Makassar's principal slave-carriers. In fact, in the case of one of them, namely Barend Jansz in 1769, there is positive proof from another source that he carried slaves on such trips (Koopmansboeken 16:31-12-1769). Others, such as Simon Burggraaf and members of his family, were regularly mentioned as contractors for the slave deliveries to the VOC (VOC 3243:21-2; VOC 3465:30). As in those years slaves were not registered by the harbourmasters, these skippers were classified as carrying nothing. By the 1780s no principal routes were recorded with substantial numbers of ships without cargoes.

If cargo-less vessels are left out of consideration and the question is asked whether or not numbers of incoming and outgoing loaded ships were in balance, then once again the 1720s pattern is distorted (Table V). While the general ratio between loaded arrivals and departures, at about 1.2 : 1, was still, relatively speaking, in balance, it appears that en route to and from Kaili, Sumbawa and Bima most trade was incoming, while on the Ambon and Banda journeys it was outgoing. For the first three ports the ratios between numbers of loaded incoming and outgoing vessels was 2 : 1, 3 : 1 and 4 : 1, respectively. However, on the Ambon and Banda route it was very difficult. As noted above, there were no inward-bound commodities at all from Ambon. In the case of Banda the ratio between incoming and outgoing loaded vessels was 1 : 9. In the 1760s the situation was more balanced, with only Bonerate showing a surplus of incoming vessels with cargo into Makassar. The ratio between incoming and outgoing on this route was 4 : 1. By the 1770s the Bonerate connection had declined sharply, creating a rough balance between arriving and departing cargo-carriers. As for the general total, the 1770s and 1780s showed more outward-bound than incoming loaded ships. This was a reversal of the pre-1770 situation. This is consistent with the conclusion on import and export surpluses drawn in the previous section.

If we examine the number of loads or shipments which composed a vessel's cargo, a somewhat different pattern in the ratio between incoming and outgoing emerges (Table V). In the 1720s there were about 11 arriving loads to 9 departing, which was more or less in line with the 1720s ratio for cargo-carrying vessels in general, as mentioned above. We have just described how the balance in the ratio for arriving and departing loaded vessels was reversed by about 1770. As far as the number of actual loads is concerned, as opposed to ships, the turning-point in this reversal between incoming and outgoing already took place ten years earlier, in the 1760s. After 1770

the excess of exports was more pronounced than it was in the case of such indicators as traffic in general or vessels carrying cargoes. The ratio between incoming and outgoing loads reached about 2 : 3 in the 1780s.

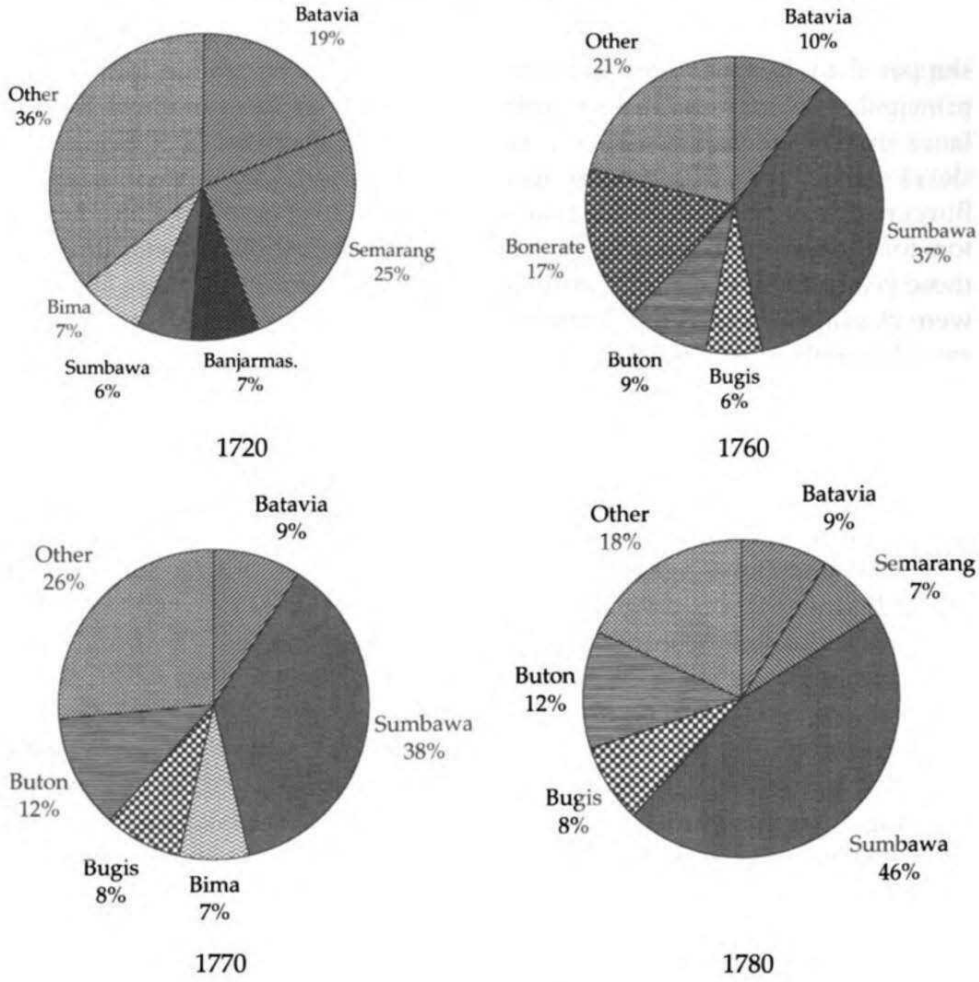


Figure 3. Annual average percentage of the total number of loaded vessels on principal routes

For Makassar, the relative importance of each route changed over time, with the overall pattern for vessels with cargoes being more or less the same as that for shipping in general (see pp. 70-4). In the 1720s, about one-fifth of the cargo-carrying ships were operating on the Batavia route and about a quarter to Semarang (Table V). If the number of actual constituent loads is taken into consideration, Batavia's share doubled to two-fifths, while Semarang, halved to a mere one-eighth, did not do as well as might be expected. Banjarmasin,

on the other hand, performed much better than anticipated, as with less than one-twelfth of loaded vessels, it carried about one-eighth of shipments. In the last part of the century the most important port, as far as cargo-carrying ships was concerned, was always Sumbawa, which drew between one-third and two-fifths of all of them before 1780 and over two-fifths after. Second in the 1760s was Bonerate with about one-sixth. In the 1770s and 1780s, Buton replaced Bonerate in second place with a share of about one-eighth. During the late 1700s Sumbawa also took the lead in the number of loads, her share climbing from a little over a quarter before 1780 to about one-third of the total after that year. Batavia managed to maintain her second position in the number of loads, although at a much lower level than in the 1720s, taking a little less than a quarter before 1770 and about one-sixth after 1770. Most of the decrease was the result of declining export shipments.

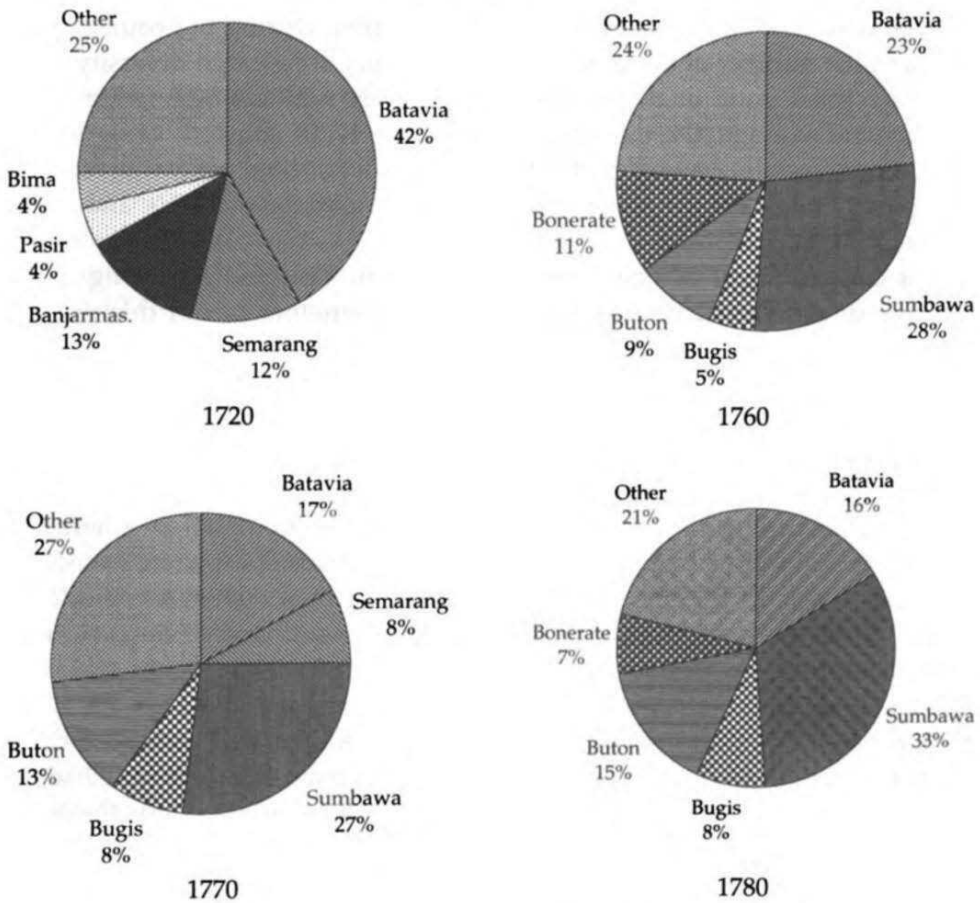


Figure 4. Annual average percentage of the total number of loads on principal routes

In an earlier chapter, we discussed broad trends in the variety within the commodity packages on board, expressed in average number of loads per cargo (see pp. 83-4). This showed a decline in diversity mid-century, followed by recovery, particularly in exports, towards the end of the period. However, as the last columns of Table V show, when routes are taken into account considerable differentiation emerges within this picture. Starting with the incoming traffic of the 1720s, we see that Batavia and Banjarmasin were ports with atypically complex cargoes, containing double the overall average of 2.77 loads per cargo, while all the other major routes performed poorly, unable to reach 50% of that average. Traffic coming from Batavia also showed high scores in cargo composition diversity in the 1760s, 1770s and 1780s. The result was two to three times as much as the overall general average of 2.01, 2.02 and 2.50, respectively. Banjarmasin was by then no longer important. From the 1770s onwards Amoy also achieved a high score in load variety, but this special case will be discussed later in this chapter. During the course of the century, the number of major routes with low incoming cargo diversity gradually declined until, finally, in the 1780s all were within a 50% range below the general average. On the outgoing side, the 1720s showed no significant deviations from the overall picture. Later, however, some ports showed load complexity twice the general average, namely Ambon in the 1760s and Amoy in the 1770s and 1780s.

Of course, cargo diversity might increase or decrease according to the volume of individual vessels involved. To see whether or not this was the case the number of loads per *last* was calculated, revealing a declining trend from 0.37 loads per *last* in the 1720s, to 0.36 in the 1760s, 0.28 in the 1770s and 0.29 in the 1780s. The figures for outgoing traffic were always somewhat higher than for incoming. This discrepancy between departures and arrivals tended to increase over time, supporting one of our previous conclusions that the most complex cargoes were for export (see pp. 83-4). Furthermore, the decrease in the number of loads per *last* mentioned above indicates that cargoes tended to become more concentrated in bulk. When these calculations are made by route, most of the previously mentioned deviations in the average number of loads tend to disappear. Batavia is no longer special in its high level of cargo diversity. However, on the incoming side in the 1720s, Banjarmasin's impressive score remained, revealing very complex cargo compositions. In fact, with 1.57 load per *last*, Banjarmasin at this time had the best rate of all the major routes, incoming as well as outgoing, for the entire century. Low scores of less than 0.10 loads per *last* could be seen on ships trading with Ambon and Banda, in particular during the 1720s, as well as those going to and from Amoy, especially after 1780. This is a sign that bulk cargoes were rather characteristic of these routes, which is, given the size of the vessels involved, no surprise.

Summarizing, it might be said that in the early eighteenth century skippers had least chance of obtaining a cargo when sailing out to Makassar's southern hemisphere, to Bima and Sumbawa, or when coming in from Maluku. In the second part of the century cargo opportunities gradually improved and sailing without one became rather uncommon. The highest number of loads was found on the Batavia trade in the early part of the century, although in the second part of the century it was surpassed by a southern hemisphere port, namely Sumbawa. Throughout the century complex cargoes, comprising a substantial variety of different loads in a cargo, were characteristic of Batavia and, in the later decades, also of the Amoy junk. However, if relative ship-size is taken into account, neither Batavia nor Amoy scored particularly high in this respect. The only port that showed a high average number of loads in the cargo per unit of volume on board was Banjarmasin and this only held good for the beginning of the century.

Private shipping, trade and ethnicity: general characteristics

Table W links, for the most important groups of skippers, ethnicity or civil status to the general pattern of cargo-carrying and the variation in number of loads discussed above. The principal categories were Chinese for all years, Burghers for the 1720s and 1760s, Malays for the 1770s and 1780s, Wajorese for the 1720s and the difficult to define Company's Subjects for the 1760s, 1770s and 1780s. The Amoy connection of the Chinese skippers has been separated from other routes sailed by Chinese, because of its special character. Table W also presents data on group performance on certain routes. Generally speaking, it seems that the selected prominent groups from Table W showed a slightly better balance between total incoming and outgoing vessels, loaded as well as unloaded, than did the maritime sector in general (Table A), perhaps because they were consistent participants, as opposed to smaller, more irregular groups operating on the fringe. Instances of such small and/or irregular categories were those of 'ethnicity unknown', from the 1720s, mainly consisting of Sulawesians, or the Galesongers, Buginese and Chinese Peranakan of the last part of the century.

Our general observation has been that a skipper in the 1720s had quite a high possibility of sailing without a cargo (see pp. 82-3). Of the principal groups in Table W, the Wajorese hardly suffered from this, unlike Chinese and Burghers, who had more chance of an empty ship. Although in general, no-merchandise skippers were mostly outgoing, these two particular categories apparently had more difficulty in finding a cargo when sailing to Makassar. About 60% of all incoming Chinese and Burgher vessels had no cargo. So it is unsurprising that the ratio between incoming and outgoing, as

far as their loaded vessels was concerned, was about 1 : 2, while among the Wajorese it was a neat 1 : 1. The disequilibrium within the first two groups was because of the routes they sailed. Maluku for instance offered very poor cargo prospects on the Makassar-bound leg, making them dependent on the carrying of money. The Wajorese on the other hand were not found on the routes to Maluku because of VOC restrictions (see pp. 20, 26) and their share of loaded vessels, in total 296, was much higher than that of their combined Chinese and Burgher colleagues, being about one-fifth as opposed to one-sixth. The Wajorese had the same favourable position in relation to the total number of loads, where they claimed more than one-third as against about one-sixth for the Chinese and Burgher skippers combined.

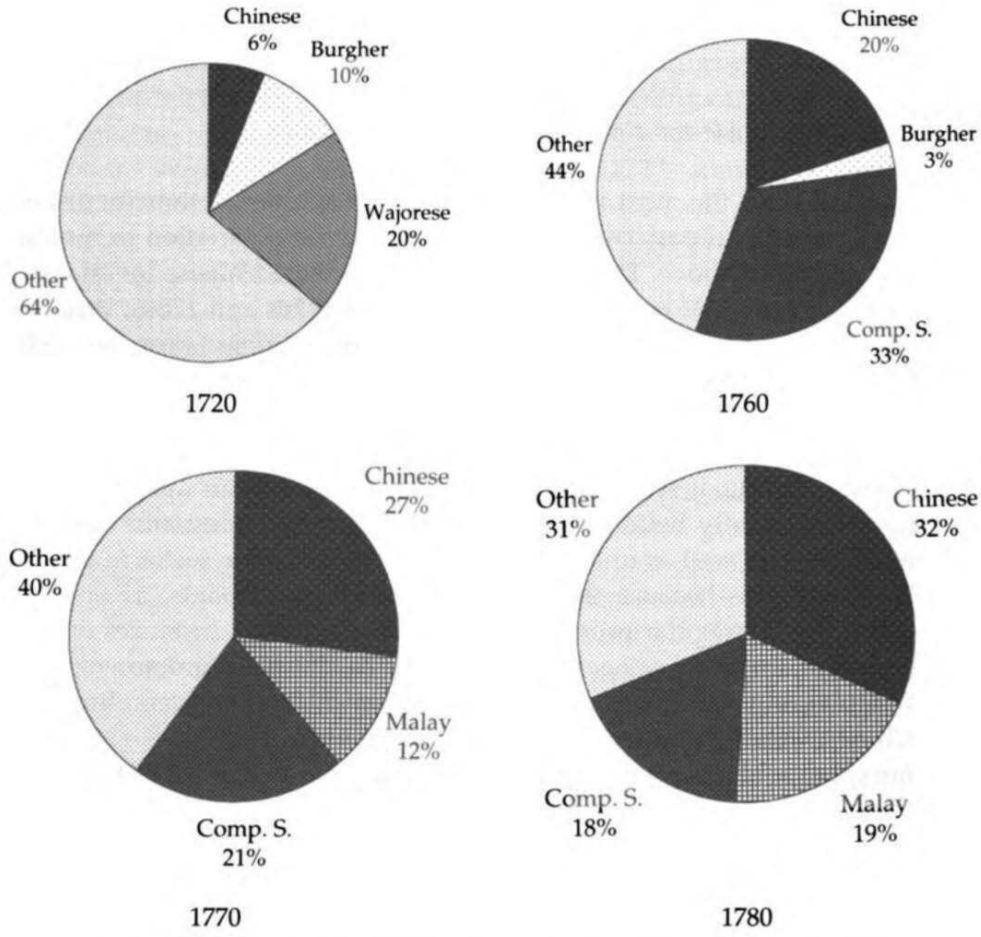


Figure 5. Annual average percentage of the total number of loaded vessels for principal ethnicities

Table W further shows that Wajorese and Chinese skippers did rather well as far as diversity of incoming cargoes was concerned, with scores double the general average of 2.77 loads per cargo. However, if the average volume of ships is linked to cargo variety, Chinese performance faltered, leaving only the Wajorese looking impressive, with an average number of loads per *last* of more than 1.00. As previously noted, the best prospects for having a differentiated cargo tended to be found on the incoming traffic from Batavia. Here again, the Wajorese did better than Chinese and Burghers. Moreover, it is striking that Wajorese also had relatively diversified cargoes on the outgoing ships to Batavia, more than twice the general average of 2.71 loads per cargo. A factor in the good performance of the Wajorese was, of course, their strong position in both legs of the Banjarmasin trade, which was a relatively productive connection.

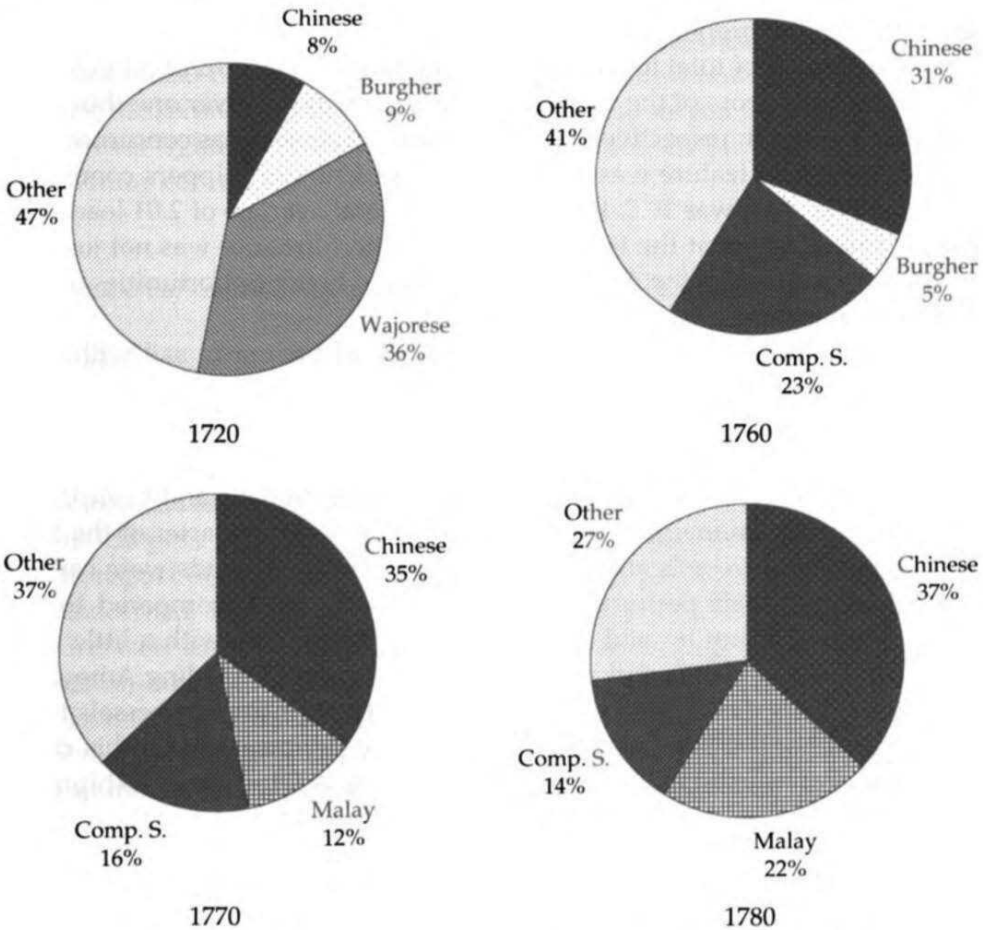


Figure 6. Annual average percentage of the total number of loads for principal ethnicities

Turning to the second half of the century, the 1760s showed that the Burgher skippers' role, although still substantial, had declined while that of the Chinese had increased (Table W). In the meantime, the rich trade ascribed to the Wajorese had vanished altogether, while the Company's Subjects had become important. Compared to the 1720s, average ships' volume had declined for all major groups. While the Chinese risk of sailing without a cargo had dropped considerably, Burghers and Company's Subjects still suffered from this. However, as mentioned above, most Burghers listed as exporting 'nothing' were in fact carrying slaves. Hence, it seems that sailing empty in reality was only a problem for Company's Subjects, where it occurred in about 40% of the voyages, mainly on departure. The ratio between loaded incoming and outgoing vessels among the Company's Subjects was 2 : 1. The main reason for this lay in the Bonerate connection, where fishing and hunting or gathering to obtain commodities was much more important than trade in the proper sense of the word. The Chinese were responsible for almost a quarter of total loaded vessels and almost one-third of all loads. In this respect, the score of the Company's Subjects was just over one-third and less than a quarter, respectively. As far as cargo diversity was concerned, the only outstanding feature was the high score of Chinese skippers coming in from Batavia. This was 10.5, five times the general average of 2.01 loads per cargo. This shows that the improved Chinese performance was not just the result of the advent of the Amoy junk, but also of better opportunities on the Batavia connection.

The 1770s saw a further decline in the risk of having to sail without a cargo, partly because of the Amoy junk's regular visits. The numbers of incoming and outgoing vessels with cargo were more or less equal (Table W). Sumbawa was the most popular trading partner for all three main groups of skippers of this period, namely Chinese, Malays and Company's Subjects, and this remained so in the 1780s. More than a quarter of the total of cargo-carrying vessels and more than one-third of all loads were carried by Chinese, so their performance had improved a little compared to the 1760s. This could not be said for the Company's Subjects, with a little over one-fifth of loaded ships and about one-sixth of loads. Excluding Amoy, the Chinese still displayed remarkable cargo variety on incoming vessels from Batavia, although it has to be admitted that the performance on this route was no longer as good as it had been in the 1760s. A fair degree of shipment diversity was also present in the Chinese Bima-bound traffic, but this was no longer a major route.

The relative ease of obtaining cargo was also clear for the 1780s, except for Company's Subjects departing for Sumbawa. The Chinese had further improved their position, claiming almost one-third of the total of loaded vessels and more than one-third of all loads. Company's Subjects scored poorly,

with less than one-fifth of vessels and about one-seventh for loads, while the better performing Malays took almost one-fifth and over one-fifth, respectively. As far as cargo diversity was concerned, the Chinese still did rather well on arrivals from Batavia and Malays on departure to Buton.

Summarizing, it can be said that in the beginning of the century the two dominant trading groups, Burghers and Chinese, had high chances of sailing without cargoes, mainly because of poor opportunities on the Maluku connection. The third group, the Wajorese, had a high rate of cargo-carrying, reflecting their strong Batavia and Banjarmasin links. However, they were no longer important players in Makassar during the second part of the century, mainly because of the strained political relations between Wajo and the VOC (see pp. 14-5). Instead Company's Subjects emerged as a numerous group. Their trading performance was, however, not as outstanding as that of the Wajorese. The Company's Subjects were the only ones who still regularly sailed empty ships. During the last third of the century the Burghers' commerce also declined gradually, while the Malays now came to the fore. During the second part of the century the Chinese surged forward, establishing an ever tighter grip on the trading sector, a process principally fuelled by their Amoy connection.

Distribution of commodities according to route, Amoy excluded

Annual averages for the major items in the flow of goods along Makassar's main routes, not counting Amoy, are given for the multi-year blocks in Table X. The rather special Amoy connection will be analysed in the section after this. In addition to data from Table X, sometimes references to value will be made here, based on calculations similar to those described at the beginning of this chapter, including the rather hypothetical estimates given there for the transport of rixdollars and slaves. As far as the rixdollars of the 1720s are concerned, in such cases more than two-thirds of the total estimated imports were assigned to Ambon and one-third to Banda, to pay for rice from Makassar, while all rixdollar exports were reckoned to go to Semarang to buy Javanese tobacco. The slave exports according to port in the 1720s were achieved by multiplying the existing but heavily under-registered annual data in the harbourmasters' records with a factor required to bring the total level of exports to 140% of imports. The hypothetical breakdowns for the 1760s and 1770s were made by roughly applying the proportions of slaving ports available from the 1780s' listing.

A first glance at Table X reveals, and this will be no surprise, that during the entire century traffic with Batavia showed the most diversity. Ambon, which in the beginning of the century handled more shipping than Batavia

(see p. 72), did relatively poor, as Maluku had almost nothing to offer to Makassar. Though towards the end of the century Sumbawa's share in the volume of shipping was about four times the size of that of Batavia, the latter could still boast a more diversified packet of trade goods.

Concentrating first on Batavia, it is clear that in the beginning of the century the strength of this route, as far as imports were concerned, was due mainly to Indian cloth with almost 11,000 pieces, arrack with almost 9,000 cans and, to a lesser extent, the trade in earthenware, such as plates, cups and jars, which exceeded 12,000 pieces. Most of the crockery must have originated from China, an indication of Batavia's function as supplier of transit-items from other parts of Asia. Measured in value, Indian textile imports realized about 21,500 rixdollars per annum, followed at a distance by Chinese tobacco with 12,000 rixdollars; together they were responsible for more than 60% of imports. Moving on to exports: over 550 *pikul* of trepang and more than 2,000 pieces of Buginese cloth left Makassar for Batavia. Slave exports were actually much greater than those registered in Table X, probably up to 375 a year, worth about 15,000 rixdollars, according to the calculations presented above. If this was in fact so, slaves contributed more than half the total value of exports. The overall Batavia trade is estimated as being worth about 79,000 rixdollars, or between 40 and 45% of the general total. Needless to say, Batavia then was Makassar's main trading partner.

The end of the 1760s showed a high volume of sea products going to Batavia, almost 1,300 *pikul* of agar-agar and more than 3,100 *pikul* of trepang, the latter being five times as much as in the 1720s. In the meantime, the exports of Buginese cloth had grown over 50%, to more than 3,700 pieces. The value of trepang was estimated at 70,500 rixdollars. Slaves were absent from the statistics, but their estimated number of 570 might have been worth some 28,500 rixdollars. Together these two products provided about three-quarters of exports. On the other hand, on the import side the Indian cloth trade from Batavia had virtually collapsed to some 2,000 pieces, or less than 20% of the 1720s level. However, in compensation the arrack trade had grown to about 20,000 cans and the supply of earthenware, in this case mainly sets of bowls and plates as well as single plates, had increased from about 12,000 to almost 20,000 pieces. Moreover, each year Batavia sent Makassar a considerable amount of rice, more than 1,300 *pikul*, and Chinese tobacco, up to almost 600 *pikul*. The latter was worth about 22,000 rixdollars, or about 30% of total imports. The total value of trade with Batavia, namely 212,000 rixdollars, was more than double that of the 1720s. This was still between 45 and 50% of all Makassar trade. It has to be kept in mind, however, that the Amoy junk was not sailing regularly in these years, which undoubtedly strengthened the Batavia connection in comparison with other ports.

The 1770s clearly show what an impact the Amoy junk had on the Batavia

trade. Trepang exports fell from more than 3,100 *pikul* in the 1760s to less than 1,400. But fortunately for the VOC capital, the Amoy junk was already so heavy loaded on departure that some goods still remained to export to China by way of Batavia. This explains, for instance, the expansion of agar-agar exports to almost 2,300 *pikul*. Batavia also absorbed more cloth, now Buginese as well as other Sulawesian textiles, the level of which, compared with the 1760s, increased from more than 3,700 to almost 5,000 pieces. The export of slaves, not mentioned in the harbourmasters' records, is estimated to be 760. Measured in value, at 38,000 and 31,500 rixdollars, slaves and trepang respectively comprised about 70% of all Batavia-bound exports. Batavia's imports provided further proof of the effects of the direct Amoy connection, as its earthenware and Chinese tobacco trade crumbled away. Since, in comparison with the 1760s, incoming rice and arrack also declined in volume to about one-half for the former and about four-fifths for the latter, it seems that the terms of trade on the Batavia connection had become unfavourable, despite a partial recovery in Indian cloth imports, from over 2,000 to more than 3,200 pieces. Measured in value, this was the only incoming trade that reached impressive levels, of 13,000 rixdollars, or about one-third of all imports. Compared to the end of the 1760s, the total value of the Batavia connection showed a considerable decline to 135,000 rixdollars, which was less than 25% of all Makassar's trade. As will be shown below, this was less than Amoy's.

Nonetheless, after 1780 there was some recovery for Batavia, especially for incoming traffic. First, Indian cloth imports more than doubled, to almost 7,700 pieces, while second, the arrack trade did even better, up from over 16,000 cans in the 1770s to almost 38,000 in the 1780s. Third, imports of iron and iron tools grew strongly, to almost 1,100 *pikul* of the former and some 19,000 pieces of the latter, mainly bush-knives and knives. Value was as follows: Indian cloth 34,500 rixdollars, opium 13,500 and iron alone 10,500 rixdollars. The first of these, Indian cloth, was thus responsible for more than one-third of imports. In the meantime exports to Batavia were far from spectacular. Trepang fell back from 1,400 to almost 1,100 *pikul*, agar-agar from almost 2,300 to just under 2,200 *pikul*, while Sulawesian cloth totals shrank dramatically from almost 5,000 to just under 2,200 pieces. The only 'positive' development was the export of more than 1,000 slaves. They and trepang were worth 64,000 and 26,000 rixdollars, respectively, and together still constituted almost 70% of exports to Batavia. The entire trade with Batavia had now recovered to 228,000 rixdollars. This was still less than 25% of Makassar's total trade.

Trade between Semarang and Makassar was characterized by the exchange of agrarian products, mainly bulk *pikul*-goods, against nothing in particular (Table X). Sulawesi had very little to offer Java. Most Semarang-bound vessels

from Makassar must have sailed with largely empty holds. This is clearly illustrated by the high exports of rixdollars, which increased from more than 7,000 in the 1770s to about 15,000 in the 1780s. It is likely that earlier in the century comparable levels were also being realized. In the 1720s, Semarang's main exports to Makassar were Javanese tobacco, rice and salt, almost reaching 2,300, 1,800 and 800 *pikul* per annum, respectively. Rice and salt might in part have been transit items on the way to Maluku, while the tobacco, valued at the considerable sum of 18,500 rixdollars, was for local consumption. Semarang was the second trading partner of Makassar, with total trade between them being worth 34,000 rixdollars, or between 15 and 20% of the total.

In the middle of the century, trade between Makassar and Semarang greatly declined, probably as a result of continuous warfare in Java in the 1740s and 1750s. Of the three main trade commodities of the 1720s, only rice with almost 700 *pikul* was still of some importance by the 1760s. However, even this was not to last, because by the 1770s rice had nearly vanished. During the mid-1770s the Semarang connection was only kept alive by the somewhat recovered tobacco trade, which nevertheless provided the basis for a subsequent boom as tobacco imports grew from almost 900 *pikul* in the 1770s to more than 2,000 in the 1780s. The value of 1780s imports of Javanese tobacco was about 16,000 rixdollars, or about 75% of all imports from Semarang. In the opposite direction, the outgoing flow of rixdollars, almost 15,000, represented some 45% of the Semarang-bound exports. The entire trade with Semarang in the 1780s stood at 53,500 rixdollars, a bare 5% of the overall total of Makassar.

In the 1720s Banjarmasin was quite important to Makassar (Table X), sending earthenware, in particular single bowls, plates and pots, up to about 33,000 pieces per annum, in return for a variety of products, among which Sulawesian textiles, in particular Buginese cloth, more than 800 pieces, was rather significant. The earthenware was probably mainly from China. Considering that Banjarmasin crockery imports were two to three times those from Batavia into Makassar, it could be said that Banjarmasin was a major channel for Makassar's imports from China. But this should not be exaggerated, because the value of the Banjarmasin connection was only 8,500 rixdollars, or less than 5% of Makassar's trade. All this changed in the mid-century. The earthenware imports from Banjarmasin vanished, being totally replaced by supplies from Batavia and, more importantly, Amoy. By the 1760s the only reminder in Makassar of the previously flourishing trade with Banjarmasin was the amount of Sulawesian textiles sent there, more than 900 pieces, mainly from Selayar, which were usually paid for in *picis*. In the 1770s the exports of cloth, now mostly Buginese again, reached a level of about 1,050 pieces. After about 1780, the connection was definitively finished. The main reasons for this, besides the Amoy factor and previously mentioned VOC obstructionism (see p. 28), was the fact that for Banjarmasin itself, Java,

in particular its eastern region and Semarang, was a more attractive trading partner than Sulawesi (Knaap 1996:122-4, 127, 131-2).

Pasir, also a Kalimantan port, had some significance for Makassar in the 1720s, but by mid-century no trade and shipping links were registered (Table X), gone for the same reasons as Banjarmasin. One specific cause of Pasir's disappearance may have been that it was there, in 1726, that Arung Singkang, one of the principal foes of the VOC and its Sulawesian allies, started his campaigns, so to isolate him the Company no longer issued passes to Pasir and Kutei. As a result, Pasir definitively withdrew from the VOC-Makassar orbit and joined the trading networks centering around Wajo (VOC 2238:158; Noorduyn 1955:127-31, 138-9). Later, in the 1770s, Pasir maintained significant contact with the VOC port of Semarang, as well as with Sulu in the north (Warren 1981:10-2; Knaap 1996:52). During the 1720s, when Pasir still had ties with Makassar, it mainly sent rattan there, over 1,600 bundles. The value of the entire trade was just over 1,000 rixdollars.

Kaili, which was of some importance to Makassar in the early 1700s, had lost much of its early commerce with Makassar by the middle of the century. However, it did not vanish all together like Pasir (Table X). The trade was characteristically an exchange of relatively low value products. The 1720s saw exports to Makassar of more than 85,000 coconut annually and imports of paddy, about 550 *pikul*. The two ports' entire commerce was worth 2,000 rixdollars.

Sumbawa's exchanges with Makassar did not mean much in the early 1700s; the only significant export to Makassar in the 1720s being about 550 *pikul* of paddy per year (Table X). The entire trade between the two was worth 3,000 rixdollars. But during the middle of the century traffic had grown and by the 1760s mainly agrarian goods were flowing from Sumbawa to Makassar, most notably rice, at almost 3,300 *pikul* per annum, and raw cotton, almost 900. In return, Sumbawa obtained about 550 pieces of Indian cloth and about 17,000 bowls and plates, both singly and in sets. Money, rixdollars and *picis*, also went to Sumbawa. It seems that Chinese commodities, supplemented by money and some cloth, were one factor in stimulating agrarian production in Sumbawa, creating an exchange of *pikul*-goods against piece-goods. The total value of trade had risen to 41,000 rixdollars, almost 10% of Makassar's total turnover. In the 1770s the export of cotton dropped temporarily, while that of rice had grown from almost 3,300 to just under 4,200 *pikul*. Makassar's Sumbawa-bound cargoes of earthenware from China, with over 36,000 pieces, had doubled in comparison to the 1760s. Measured in value, Sumbawa also absorbed a remarkable 11,500 rixdollars worth of expensive raw silk, which contributed to more than half the value of Makassar's exports to Sumbawa. In the 1770s the entire trade between Makassar and Sumbawa had grown to 59,000 rixdollars.

A real explosion of production seems to have taken place on Sumbawa after 1780. Raw cotton shipments to Makassar reached the remarkable level of almost 2,600 *pikul*, while those of rice more than doubled, to over 9,800 *pikul*. The rice trade was worth 14,500 rixdollars and that of trepang 11,000 rixdollars. Together these two constituted about 50% of all Makassar's imports from Sumbawa. This upward trend was paralleled by Makassar's exchange commodities; earthenware exports passed the 40,000 pieces level, those of rixdollars grew to 15,500, the latter thus becoming the leading item in value. Textile exports to Sumbawa rose more than five-fold, to about 2,850 pieces. Here the main contribution to the expansion came from Chinese linen, followed at some distance by Indian cloth. The value of trade between Makassar and Sumbawa was now 111,000 rixdollars, equal to over 10% of all Makassar's trade.

As has been described previously, in the 1720s the Bima route, like that of its neighbour Sumbawa, showed a rather high proportion of ships sailing there without merchandise. It sent Makassar paddy, almost 900 *pikul* per annum (Table X). The total trade between Makassar and Bima was worth a little over 1,500 rixdollars, which was about half Sumbawa's level and less than one-third of that of nearby Sumba. The latter made about 5,000 rixdollars per annum, mainly by exporting slaves to Makassar. Returning to Bima, here we see, in contrast to Sumbawa, no mid-century upsurge in agrarian exports. The reasons for this difference are not yet clear (De Jong Boers forthcoming). However, from about 1770 on there seems to have been some acceleration of trade between Makassar and Bima, but with the latter exporting marine rather than agrarian products, primarily in exchange for Chinese earthenware. In the 1780s the entire trade between Bima and Makassar was valued at 7,000 rixdollars.

In the beginning of the century, exchange with Bugis or Cenrana Bone was insignificant for Makassar. However, from the mid-1700s on Bugis became an important factor (Table X), providing Makassar with a mix of marine products, in particular trepang, and slaves. The return-cargoes were rather varied, with money being gradually replaced by actual commodities. In the 1760s the entire trade was worth 19,500 rixdollars and in the 1780s 39,000, almost 5% of Makassar's total.

Buton's trade with Makassar was already significant early in the 1700s, but the real boom came later, from mid-century onwards (Table X). Marine products, in particular trepang, seem to have been the motor behind this expansion. Makassar's trepang imports from Buton grew from about 550 to almost 900 and then to about 1,050 *pikul*, for the 1760s, 1770s and 1780s, respectively, worth about 12,000, 19,500 and 26,000 rixdollars. In fact, about 55 to 60% of all imports from Buton consisted of trepang. The exchange cargoes were a similar mix to those for Sumbawa, but in a different order, namely textiles, Chinese earthenware and money. In the 1760s textile exports

to Buton amounted to about 1,250 pieces, mostly Selayar-made. By the 1770s these had increased almost five-fold, to about 6,250 pieces, again mostly from Selayar, but with considerable shares also of Chinese linen and Indian cloth. In the 1780s there was a decline to the still impressive level of about 4,550 pieces. It seems that the decrease was mainly due to a drastic drop in the textile supply from Selayar. Although Indian cloth exports to Buton almost doubled and those of Chinese linen increased almost three-fold, this could not compensate fully for Selayar's collapse. The gap was filled by increases in Buton-bound rixdollars, almost 5,500 in the 1780s, and Chinese bowls and plates, single and sets, almost 22,000 pieces. The entire trade with Buton was worth 27,000 rixdollars in the 1760s and 74,000 in the 1780s, producing shares in Makassar's total of between 5 and 7.5%.

Bonerate entered the Makassar scene in the middle of the century; no shipping and trade contacts were recorded before that. As a port Bonerate actually represents a small group of islands, in the eastern part of the Flores Sea, half way between Sulawesi and Nusa Tenggara, strategically located as a rendezvous, for instance for trepang fleets. Indeed, the trepang trade was central to the Bonerate connection. By the 1760s, Makassar was importing more than 850 *pikul*, worth 19,500 rixdollars. After about 1770 the trepang trade declined somewhat, being replaced by other commodities. Makassar's exports to Bonerate consisted of money and textiles, with the latter reaching almost 1,400 pieces per annum by the 1780s, mostly Chinese linen and Indian cloth. These relatively high numbers for the Bonerate-bound exports emphasize that Bonerate should not only be seen as a base for fishers and gatherers from Makassar, but also as a small entrepôt, for other sailors and traders, bringing in products from surrounding areas, stretching across the Flores and Banda Seas (Table X). The entire value of trade for the 1760s, 1770s and 1780s was 35,000, 21,500 and 30,500 rixdollars, respectively, revealing a trend from about 8 to 3% of Makassar's seaborne commerce.

Ende on Flores was home to a many a Sulawesian and Malay trader and shipping contacts with Makassar were recorded from the beginning of the century. Because of Ende's rich supply of slaves, the entire trade of the 1720s, worth almost 3,500 rixdollars per annum, even exceeded that of Bima and Sumbawa. Ende's importance gradually increased in the course of the century. Next to slaves, coconut oil became a substantial commodity, with the annual supply to Makassar growing tremendously, from almost 6,000 cans in the 1760s, to about 16,500 in the 1770s and 21,000 in the 1780s. By the last period Ende's slave exports to Makassar reached almost 350 per annum. This human merchandise was worth about 20,500 rixdollars, about 70% of the value of Makassar's imports from Ende. Makassar sent little to Ende (Table X). In the 1780s the entire trade between the two amounted to 32,000 rixdollars, about 3% of Makassar's commerce.

Ambon was an important trading partner at the beginning of the century. In the 1720s her annual rice imports from Makassar almost reached 11,000 *pikul*, worth about the same number of rixdollars. Rice alone was actually responsible for some 80% of all Makassar's exports to Ambon. The other substantial export product was salt, with almost 750 *pikul*. What was brought back in return is not specified in the statistics (Table X), but was obviously rixdollars. The entire Ambon-Makassar trade of the 1720s had an estimated value of 23,000 rixdollars, or about 15% of Makassar's total. Over the rest of the century the Ambon connection declined (see p. 72). By the 1760s Makassar's salt exports had disappeared, while rice exports, at just under 1,100 *pikul*, were a mere 10% of the 1720s level. In the 1770s rice further declined to be practically gone by the 1780s.

But the situation was actually more complex than it would seem just on the basis of outgoing rice (Table X). During the 1760s and 1770s quite a lot of money, about 7,500 to 8,500 rixdollars per annum, still came into Makassar from Ambon. These rixdollars were now primarily used to finance Ambon's considerable demand for textiles, about 7,000 pieces per annum, mainly of Selayar, Buginese and other Sulawesian origin. However, this cloth alternative to the old rice exports did not last either, declining to just over 2,400 pieces in the 1770s and under 1,700 by the 1780s. Selayar's cloth was best able to maintain its position. The decline in these outgoing commodities was too great to be balanced by a compensatory rise in exports of Chinese earthenware, reaching about 13,000 pieces in the 1780s, mostly in bowl and plate sets. The whole trade with Ambon, which had still been valued at 18,500 rixdollars in the 1760s, ended up worth a mere 12,500 in the 1780s.

The trade to and from Banda was very similar to that of Ambon. Makassar's annual rice exports to Banda in the 1720s were about 6,350 *pikul*, almost 60% of those to Ambon, and must have been exchanged for rixdollars. The value of the entire trade is estimated at 12,500 rixdollars. A disastrous dip in mid-century was followed by a partial recovery from about 1780 (Table X). The fact that Banda could provide both trepang and birds' nests brought new opportunities, as the islands probably acted, partly at least, as an entrepôt for the Southeast Moluccas. Chinese earthenware did relatively well as an export to Banda, with almost 13,000 pieces per annum, mostly bowl and plate sets, in this respect equalling Ambon. The same was true for the 1780s textile exports it absorbed, more than 1,600 pieces, mostly Buginese cloth and Chinese linen. By the 1780s Makassar's entire trade with Banda was valued at 22,000 rixdollars, now far exceeding that with Ambon.

The Amoy connection

Towards the end of January, 1746, the junk *Toakaytsjeu* from Amoy sailed into Makassar, skippered by Tanhoetko, a former resident of the town. The local VOC government was taken by surprise. According to regulations the junk should have been confiscated, but the authorities decided not to do so, because the ship was damaged and could claim an emergency and, probably more importantly, because local Burghers and other traders immediately requested permission to trade with her (VOC 776:42-3; VOC 2674:30). VOC policy was that all private trade between China and the Malayo-Indonesian Archipelago should be concentrated in Batavia (Blussé 1986:147-8; Knaap 1996:16). Consequently, a direct Amoy-Makassar link was officially unacceptable. Nevertheless, the High Government of Batavia approved Makassar's 1746 decision, provided that 10% import duties on Chinese tobacco be paid to the tobacco tax farmer in Batavia. The rest of the merchandise would be liable to the ordinary import duties of 5%. The skipper also had to be explicitly instructed that he should not come back the following year. If he wanted to trade with the southern seas, he should sail to Batavia (VOC 776:42-3).

The policy concerning Makassar's junk fluctuated over the following decades. The High Government forbade its arrival in 1749 and 1750, but allowed it again in 1753. From 1765 onwards it was prohibited once more, but this decision was revised in 1768, so from 1769 the junk could return. This revision of 1768 was only taken after considerable pressure by the local VOC government in Makassar and by the ruler of Bone (VOC 794:456-7; VOC 798:548-50). The taxes the junk had to pay remained a matter of contention. In 1753, for instance, the customs farmer of Makassar, Quepodang, levied a duty of 8% on both incoming and outgoing cargo, collecting almost 3,750 rixdollars. After complaints from the junk's representatives, this was lowered to the legal 5%, and Quepodang refunded about 1,400 rixdollars. Consequently, the 1750s levies due may be estimated at about 2,500 rixdollars. In 1768, however, the junk was ordered to pay a lump sum of 4,000 rixdollars for import and export duties. One year later this was lowered to 3,000 rixdollars, equal to the payments of the biggest junks arriving in Batavia. However, it was not until the beginning of the 1770s, that Makassar's customs farmer was reconciled to this lesser amount (VOC 798:550; VOC 799:699-700; VOC 802:50-1; VOC 2859:181, 188-93). After 1758 an edict forbade commanding officers of junks from landing new immigrants in VOC areas. When this prohibition was reiterated in 1777, it was stated that migration was hardly an issue in Makassar, as the junk usually had barely enough men on board to sail her, though occasionally somebody might stay for a year in Makassar, for example to collect outstanding debts (VOC 3493:90-1; VOC 3673-2:29-30).

An account of a visit on board the Amoy junk is found in the published

travel account of the VOC skipper Johan Splinter Stavorinus, who visited Makassar with his ship *Ouwerkerk* in 1775. He describes the junk as having a hold, divided into many compartments to stow the merchandise of each individual trader on board. In the stern of the ship there were many bamboo sheds to lodge the chief merchants. Once in Makassar, the traders sold their commodities in one or more houses ashore. Stavorinus also mentioned that the value of the incoming cargo was estimated by the Governor of Makassar, Paulus Godefridus van der Voort, to be worth about 40,000 *reaal* (Stavorinus 1797:139, 142, 221-2). As a *reaal* was reckoned to be 1.25 rixdollar (*Verhandeling* 1786:311), the imports could thus be valued at 50,000 rixdollars. Later on, we will see that this was quite a conservative guess.

In the archive there is a complete cargo report on the 1755 junk, giving a detailed list of 59 incoming items and 10 outgoing, some being variations on the same product. For example, there were 4 types of umbrellas, 5 types of paper, 6 different sorts of bowls, 11 of plates and 7 of trepang. There were no bowls and plates listed as sets. With the exception of single bowls and single plates, with more than 63,000 and 42,000 pieces, respectively, the cargo was less voluminous than those listed by the harbourmasters later in the century. The total value of the incoming commodities was 29,372 rixdollars, of the outgoing 17,301. By far the most significant import was the 355 *pikul* of Chinese tobacco, worth 12,442 rixdollars, more than 40% of the total incoming value. Second was silk-yarn or raw silk, with 18.5 *pikul* at 5,550 rixdollars. Third was the load of 200 chests of gold thread, worth 2,200 rixdollars. Because of their relative cheapness bowls and plates did not count for much in value terms. Turning to exports, trepang was by far the most important. The load of 741 *pikul*, worth 15,616 rixdollars, represented 90% of the total exported value (VOC 2859-1:190-2). Further insight into the Chinese tobacco business can be obtained from specifications of its ownership in the junks of 1764 and 1766. In both cases the total volume of Chinese tobacco was 347 *pikul*. A share of 16% was imported by the *kongsi* or 'partnership', probably of the investors who equipped the junk. Another 9% was in the hands of the skipper, the clerk and the first mate. The remaining 75% were owned by 13 to 14 individual merchants, averaging a little over 19 *pikul* each (VOC 3181-3:53-4).

The junk entering Makassar in February 1769, the first covered by the harbourmasters' administration, was the *Samasoen* commanded by the skipper Thesoeko, 166 *last* in volume and carrying a crew of 78. It sailed from Makassar in June. From 1774 to 1777 the junk was the *Ikhin* under the command of Quepoko, with a similar volume, 170 *last*, but a much larger crew, of between 125 and 135 hands. This was the one visited by Stavorinus. On arrival in Makassar there were usually also 10 to 30 passengers on board, in addition to the crew. Junk-names were not listed by the harbourmasters for the 1780s. In 1787 the commander was Queleko, who ran his ship aground

and had to jettison part of the cargo to refloat it. This near-disaster might have been the reason why in 1788 and 1789, it was another Que who was in charge of the vessel, namely Quepolong. The capacity of the ships of the late 1780s, measured in *last*, was more than double that of the 1770s (see p. 49). This growth had been achieved in two steps, with a junk of 300 *last* in 1780, climbing to 400 in 1784 (VOC 3580; VOC 3673). Quepolong's ships had crews varying between 161 and 215 hands and a few passengers, 10 to 15. The last of the junks followed in this project, the one of 1797, was no longer in Que hands, but commanded by Ongkongiem. The junks were usually very well-stocked. In the 1770s and 1780s the average number of different commodities was 18 and 19 on arrival and 5 and 8 on departure (Table Y). The figures also make it obvious why the investors decided to move to a bigger vessel in the 1780s. This was not so much to accommodate Makassar's imports, but rather to create room for the export of marine produce.

The 1769 junk imported *picis*, tea, Chinese tobacco, bowls, plates and pans. Almost all bowls, pans and tea imported into Makassar that year came from Amoy. On departure only two commodities were carried, trepang and wax, with the junk taking respectively one- and two-thirds of Makassar's total volume. From about 1770 onwards the annual Amoy junk became a structural feature of Makassar's private trade sector, with very considerable annual imports and exports (Table Y). It appears that large quantities of Chinese tobacco, up to more than 750 *pikul*, bowls and plates in sets, plates, pans and umbrellas, respectively in numbers of almost 36,000 pieces, over 18,000, almost 4,000 and more than 2,100, were entering Makassar on the junk. Amoy's share in the total volume of imports of such products was usually 80% or more, sometimes even 100%. Such high levels were in part realized by encroaching on Batavia's traditional share. The exports of the 1770s were somewhat more diverse than those in 1769, the main items being trepang, agar-agar and rattan. In the case of trepang, with shipments of almost 3,200 *pikul* annually, Amoy was now claiming two-thirds of total turnover. The export of agar-agar was over 550 *pikul* and of rattan over 850 bundles. Generally speaking, the Amoy trade might be characterized as an exchange of piece-goods for *pikul*-goods.

In the 1780s, the growth in junk size naturally influenced cargo volume. While imports of Chinese tobacco, almost 800 *pikul*, remained constant and the number of sets of bowls and plates declined, there was a great expansion of imports of single bowls, single plates, pans, Chinese linen, Chinese cloth and umbrellas (Table Y). Hats on the contrary disappeared from the records. Instead, a large number of blouses were recorded. Chinese linen imports grew from just over 1,500 to 4,400 pieces annually, while those of Chinese cloth increased from nothing in the 1770s to 1,600 in the 1780s. The total annual amount of linen, cloth and blouses was 7,700 pieces, more or

Table 28. Estimated average annual value of selected commodities in the cargo of the Amoy junk, in rixdollars, percentage between brackets

	1770s		1780s	
Imports				
Linen, Chinese	7,500	(9)	11,000	(9)
Pans	4,000	(5)	15,000	(12)
Silk, raw	10,000	(11)	18,000	(15)
Tea	13,500	(15)	8,000	(7)
Tobacco, Chinese	28,500	(33)	29,000	(24)
Total	87,500	(100)	122,000	(100)
Exports				
Birds' nests	–	–	8,000	(4)
Trepang	71,000	(74)	147,000	(72)
Wax	3,500	(4)	–	–
Total	95,000	(100)	204,000	(100)

less equal to Indian cloth imports from Batavia into Makassar (Table X). The number of pans from Amoy almost quadrupled to more than 15,000. However, the most impressive category was earthenware. Imports of bowls and plates, either as single pieces or in combination, leapt from about 56,500 in the 1770s to about 107,500 in the 1780s. In most of these cases Amoy had a complete or near-monopoly of imports. The principal export items were trepang, agar-agar, rattan and buffalo meat. With the exception of agar-agar Amoy had a virtual monopoly in Makassar here as well. The level of agar-agar exports remained stable at a 500 *pikul* level. Compared to the 1770s, trepang exports had doubled to a tremendous 6,000 *pikul* per annum, while those of rattan tripled to 3,000 bundles.

Table 28 is a testimony to the tremendous importance of the Amoy trade for Makassar. The 1755 junk had a value of 47,000 rixdollars for import and export combined, that of 1769 was worth 117,000 rixdollars and those for the 1770s and late-1780s 182,500 and 326,000 rixdollars, respectively. In a period of about 33 years the trade had grown almost six-fold, giving an annual compound growth rate of more than 10%. The share of Amoy in Makassar's total value of trade was 33% in the 1770s and 34% in the 1780s, making it the number one trading partner. In comparison, Batavia had to make do in those years with less than 25%. However, the relative stability of these figures also proves that the formative stage of the Amoy-dominated trading networks of Makassar lasted to about 1770. After that, consolidation set in. Within the cargo the dominant import item was Chinese tobacco, followed by either tea or raw silk. On departure one product towered above all others, namely trepang, with 70 to 75% of the value. However, with the growth in

junk size the relative share of both Chinese tobacco and trepang seems to have declined somewhat, giving way to other commodities. In the 1770s the average value per *last* on the Amoy route was 537 rixdollars and in the 1780s 407. This was three and two times the general average for Makassar for those years (Table 27). Such a difference might seem spectacular, but the consideration that an Amoy junk had to sail on average about five times as far as other ships in the Makassar networks restores a sense of proportion.

Distribution of commodities according to ethnicity, Amoy excluded

Table Z gives annual average imports and exports of the most important commodities for the major three ethnicities in each of the four multi-year blocks. The only ethnic group continuously present in all blocks are the Chinese, whose performance steadily improved in the course of the century, not least because of their connection with the Amoy junk. The Burghers, on the other hand, showed relative decline. By 1770, Malay skippers had drawn level with the Burghers and then passed them. In the beginning of the century the most important Sulawesian skippers were the Wajorese, but due to political turmoil and changes in network direction, their role in Makassar was taken over by others, primarily the so-called Company's Subjects (see pp. 58-61).

In the 1720s both Chinese and Burgher skippers were strongly entrenched in rice exports to Maluku, of which roughly two-thirds went to Ambon and one-third to Banda. The net-exports were just under and over an 7,000 *pikul* per annum, for Chinese and Burghers respectively (Table Z). As the Burghers added another 1,500 *pikul* to this, which they had imported from Java for re-export, mainly from Semarang, they handled more than 9,000 *pikul* of rice for sale. Both groups of skippers were well equipped for this bulk trade as they usually sailed relatively spacious vessels with average volumes of between 25 and 30 *last* (see p. 60). Besides this, both groups played major roles in arrack imports from Batavia, the Chinese with about 3,500 cans annually and the Burghers with about 4,500. Furthermore, the Chinese also had a strong grip on earthenware imports, mainly from China via Batavia, bringing in almost 12,500 bowls, plates, cups and jars annually. For the Burghers it was less easy to tap crockery supplies from China. However, it appears that they had an alternative in the transit trade of salt from Java, in particular Semarang, to Maluku, the volume of which was 900 to 1,000 *pikul* annually. An even better alternative, although heavily under-registered by the harbourmasters, was the export of slaves to Batavia, estimated to be almost 200 per annum.

Given the fact that the third group of 1720s skippers, the Wajorese, only sailed vessels with an average volume of about 5 *last*, one is inclined not to hold too high hopes for their trade (see p. 60). Nevertheless, their perform-

ance in rice exports, with more than 500 *pikul* annually, mainly to Banjarmasin, and in bringing in Javanese tobacco, more than 350 *pikul*, primarily from Semarang, was still remarkable. Moreover, if we look at the trade in piece-goods, it is clear that any pessimism concerning Wajorese trading capacity would be quite misplaced (Table Z). In bowls, plates, cups and jars and pots, the Wajorese could boast of importing about 23,500 pieces, almost twice as many as the Chinese. They obtained these in Banjarmasin. But there was still another area in which the Wajorese did extremely well and that was the textile trade. The Wajorese imported, mainly from Batavia, more than 7,700 pieces of Indian cloth, 71% of the total turnover. In value this represented the substantial sum of approximately 15,500 rixdollars. Their good performance in the textile trade was not restricted to imports, as the Wajorese did quite well in exporting more than 3,000 pieces per annum. Most of this was Buginese cloth, which mainly went to Batavia. As has already been noted, all this ended once the Wajorese leader Arung Singkang launched his challenge to the VOC and its allies from Pasir in 1726. The Wajorese retreat from VOC-controlled circuits was exacerbated when towards the end of the 1720s the ruler of Bone prohibited their trade to Batavia. In 1735 the inhabitants of the Wajorese settlement in Makassar finally chose for Arung Singkang. Wajorese merchants left the town to return only seven years later, in 1742. The new Kampung Wajo, however, proved a shadow of its former self (VOC 2133-2:116-8; Noorduyn 2000:105-7).

No other Sulawesian ethnicity trading out of Makassar could match the Wajorese. Although Makassarese skippers more or less equalled them in numbers, they generally sailed smaller vessels (see p. 60) and were only really active in paddy imports, with almost 600 *pikul* per annum, and, to an even lesser extent, in those of Javanese tobacco. The much smaller group of Buginese also only performed well in importing this tobacco, bringing in more than 450 *pikul* annually. However, many Sulawesian skippers were hidden in the category with no ethnic or status label. In the 1720s, this group was successful in bringing in coconuts, with almost 85,000 pieces per annum, rattan, almost 1,500 bundles, and Javanese tobacco, almost 750 *pikul*. The first two cases, coconut and rattan, make it clear that Sulawesians were relatively well represented in the trade around the Makassar Straits. The last commodity mentioned, tobacco, came from Java and it is significant that unlabelled skippers exceeded all other ethnicities in this trade. On the export side they handled over 600 *pikul* of paddy and almost 750 *pikul* of rice.

From the point of view of value it appears that the trade of the Chinese was worth about 36,000 rixdollars, or 20% of Makassar's total. The Burghers did somewhat better with 42,000 rixdollars or 23%, but even they were outperformed by their Wajorese colleagues, who reached 44,000 rixdollars or 24%. The other Sulawesians, the Makassarese, Buginese and no-label cat-

egory, scored 9,000, 10,000 and 26,500 rixdollars, respectively. Consequently, the aggregated total for all Sulawesians was 89,500 or 49%. Their proportion of the entire trade was more or less in line with their share in shipping volume (see p. 59; Table 4). There were only two instances where shares in shipping and in trade failed to coincide, namely the Burghers, whose percentage of trade was only two-thirds of the level of their shipping volume, and the Wajorese, whose trade share was three times that of their claim on ships' capacity. In other words, the Burghers did not use the space on board very well, while the Wajorese were extremely efficient in this respect.

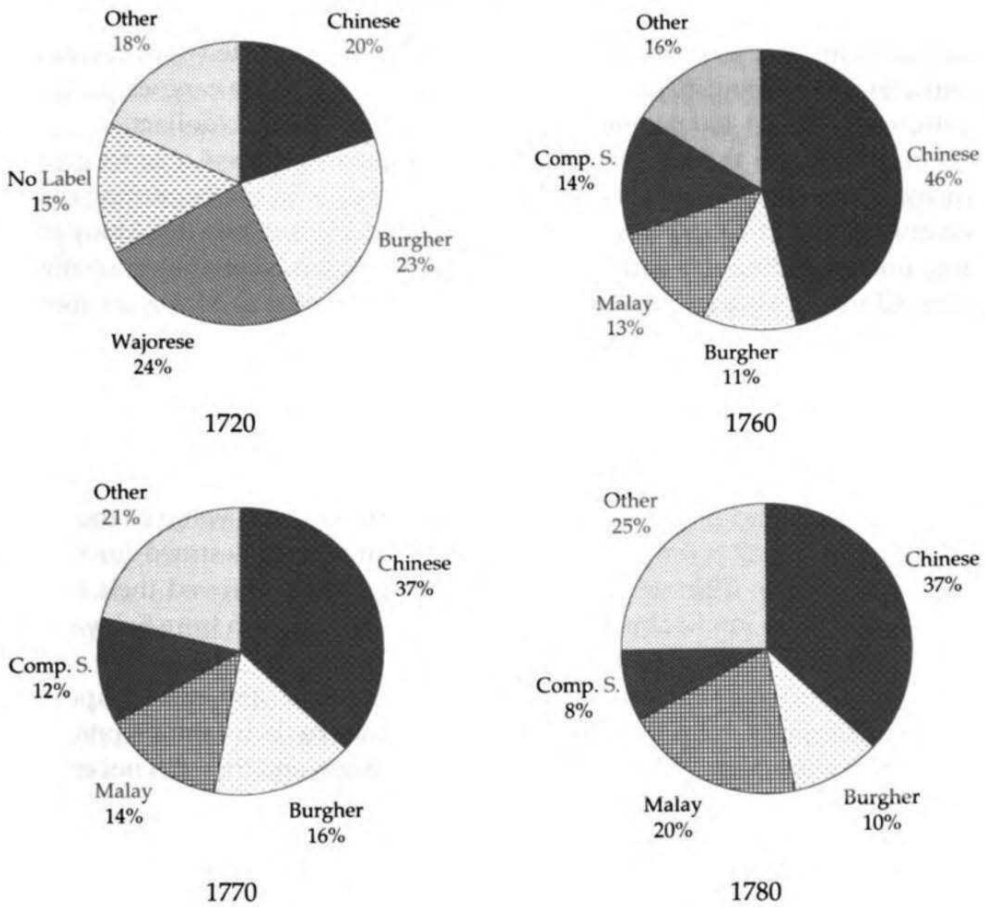


Figure 7. Annual average estimated value of trade of principal ethnicities, Amoy excluded

The disappearance of bulk exports to Maluku in mid-century was a major blow for both Chinese and Burgher skippers. It seems that the latter were slower to adapt to the new situation, because by the 1760s they still sailed vessels averaging almost 20 *last*, whereas the Chinese had fallen back to averages of almost 10 *last* (see pp. 60-1). In so far as the rice trade was still important, it was only in imports. In the 1760s the Burghers brought in almost 1,500 *pikul*, mainly from Java, a level exceeded by the Chinese with more than 2,300 per annum (Table Z). The Burghers had had to struggle to expand their arrack imports from Batavia, which had only grown from about 4,500 cans in the 1720s to about 5,800 in the 1760s. However, it seems that the Burghers had found some consolation in the increasing imports of European drinks, such as beer, wine and jenever. Their main export, slaves, as noted above, was not listed by the harbourmasters during the 1760s. Their slave cargoes probably comprised almost 400 people, to a value of about 19,500 rixdollars.

In contrast to the Burghers, Chinese skippers had been able to greatly increase their arrack imports, from about 3,500 cans in the beginning of the century to about 13,750 towards the end of the 1760s. Since the Amoy junk was not yet sailing regularly, it was largely up to the Nanyang or 'southern seas' Chinese to bring Chinese tobacco and earthenware to Makassar, raising their 1760s imports to about 450 *pikul* of the former and more than 23,000 pieces of the latter. Measured in value, the leading commodity brought in by Chinese was this tobacco at over 16,000 rixdollars. The Chinese also did quite well with incoming trepang and raw cotton, some 450 *pikul* of each. Growing imports were matched by a great increase in exports of agar-agar, to more than 800 *pikul*, and of trepang, more than 2,100 *pikul*. The value of the latter was quite high, 47,500 rixdollars. Both were ultimately destined for China. In the meantime, Chinese skippers had also greatly improved their role in outgoing textiles, up to almost 4,400 pieces, mainly of cloth from Selayar and other parts of Sulawesi, bound for Ambon.

The Company's Subjects, who had taken over as the most important Sulawesian group from the Wajorese, were not up to their famous predecessors. Their ships were also 2 *last* smaller, at only 3 *last*, and they did not emerge as major players in the Makassar Straits or, with a few exceptions, on the Java route. They were mainly active in Makassar's southern hemisphere, the Flores Sea, importing over 1,500 *pikul* of rice, mainly from Sumbawa, and about 950 *pikul* of trepang, mainly from Bonerate (Table Z). In fact, the Company's Subjects' networks seem to have been to a large extent complementary to Chinese activities rather than forming an autonomous system in its own right. In this context it is worth noting that Chinese Peranakan skippers also had gained in importance by the mid-century. They were noteworthy in cloth exports, mostly of Sulawesian manufacture, with 2,000 pieces. In exports, Company's Subjects did rather well in textiles also, mostly of Buginese origin,

carrying up to more than 1,400 pieces, in particular on the Batavia route.

The 1770s brought some qualitative changes in the Nanyang Chinese skippers' trade in Makassar (Table Z). Although they were able to improve the amounts of rice and trepang they brought in, up to about 2,850 and 500 *pikul* respectively, their incoming arrack dropped dramatically, from about 13,750 to 6,000 cans. Furthermore, their raw cotton imports had dwindled. Even more striking was the virtual disappearance of Chinese tobacco and Chinese earthenware from their incoming cargoes. These were taken over by the Amoy junk. Clearly, the advent of the junk was not necessarily positive for all Chinese, damaging as it did many a fellow-countryman's commerce with Batavia. Fortunately, the impact was less painful on the export side, where local Chinese skippers adapted well. Although the amount of trepang they carried to Batavia was more than halved, from over 2,100 to 1,000 *pikul*, it was still worth a good 22,500 rixdollars, while agar-agar exports more or less doubled, from over 800 to almost 1,550 *pikul*. Such efforts at product substitution were also visible in piece-good exports. While textile exports dropped sharply from almost 4,400 to about 1,050 pieces, those of earthenware, bought from the junk, rose to the unexpected level of approximately 58,000 pieces. Most of these outgoing cargoes were destined for Makassar's southern hemisphere.

After the reorientation of the 1770s, there was a tremendous upsurge in Chinese skippers' activity during the 1780s (Table Z). To some extent this growth paralleled a further decline in Burgher trade. Chinese arrack imports recovered again to a level of about 16,600 cans, while those of rice more than doubled from about 2,850 to 6,400 *pikul* per annum. Similarly, incoming consignments of raw cotton also recovered strongly to about 1,750 *pikul* and those of trepang reached almost 1,000 *pikul*. At about 24,500 rixdollars, trepang was their major import. Their exports of trepang, however, showed a slight further decline, from 1,000 to 800 *pikul*. Nevertheless, trepang was still the leading outgoing commodity, with an estimated value of almost 20,000 rixdollars. In the meantime the Chinese had seized good shares in incoming Javanese tobacco, salt and Indian cloth, up to almost 550 *pikul* for the first two, and to 4,000 pieces for the last. The value of their textile imports was 18,000 rixdollars. In exports, there was a slight decline for agar-agar, from almost 1,550 to just over 1,250 *pikul*. On the other hand, the Chinese seemed to have carved out a role for themselves in carrying slaves to Batavia, about 200 people per year. Their earthenware exports also increased, from about 58,000 to more than 66,000 pieces, as did those of cloth, growing from 1,050 to more than 4,800 pieces. Although it is tempting to see a direct link between Chinese skippers' high levels of textile imports and exports, we must remember that the former were mainly Indian manufactures, while the latter principally consisted of Chinese linen and Sulawesian cloth. Chinese linen was

mainly intended for the market around the Flores Sea, while Sulawesian cloth was popular in Maluku.

In the 1770s the Burgher rice trade declined further, from almost 1,500 to 1,100 *pikul* per annum. On the other hand, European drink imports had grown to more than 2,500 cans a year. The 1760s pattern for arrack was now reversed, with Chinese skippers losing market share during the 1770s, while the Burghers, ironically, increased their annual imports from about 5,800 to almost 10,000 cans. Furthermore, the Burghers had managed to build up a strong position in coconut oil, bringing in about 3,000 cans per annum, mainly from Surabaya. It is also noteworthy that their rixdollar imports doubled to more than 6,600. In Burgher exports, only textiles saw such an upsurge, from more than 1,100 pieces in the 1760s to 2,500 in the 1770s, mainly of Sulawesian cloth. Again, unrecorded slave cargoes for Batavia were extremely important for the Burghers, who probably sailed out with more than 500 per annum, up to a value of about 26,000 rixdollars. Although by the 1780s Burgher skippers had become a rather small group, they still managed to make a good showing in a few sectors. They had lost out dramatically in the incoming trade in rice, coconut oil and rixdollars, but did quite well in beverages, continuing to bring in 2,500 cans of European drinks, while increasing their arrack imports to more than 14,000 cans annually. In this respect they were not far behind the Chinese. While the Burghers had definitively fallen behind in textile exports, they were still particularly strong in slaves, carrying almost 750 people a year out of Makassar, whose worth was almost 44,500 rixdollars.

During the middle of the century the Malays had come to the fore. They were an old established community, with a tradition of independent trade and shipping, like the Burghers and Wajorese. By 1770, they were sailing vessels of some 6 to 7 *last* on average (see p. 61). Their patterns of trade did not seem to have any outstanding features (Table Z), though on closer examination, we do see that the 1770s was a period of stagnation for Malay skippers. This was especially true for their rice imports, which had reached levels of about 900 *pikul* in the 1760s, and their exports of, mainly Sulawesian, textiles, almost 2,000 pieces in the same period. By the 1770s, however, they had lost these strong positions. On the other hand, they did bring in large quantities of agar-agar, some 550 *pikul* annually, most being sold in Makassar to Chinese exporters (see p. 99). Furthermore, the Malays, with almost 9,000 cans, dominated coconut oil imports, building on their 1760s position, when they had already over-shadowed every other group with over 4,000 cans. Most of their oil came from Ende. By the 1780s agar-agar imports had declined a little, but now the Malays were exporting more of this product, up to 550 *pikul*. In the coconut oil business they had been able to more than double their imports, from about 9,000 to almost 20,000 cans. Their incoming rice cargoes reached

a level of more than 1,600 *pikul*, while those of raw cotton and Indian textiles formed a significant part of the total. Moreover, they were the leading slave importers, bringing in almost 400 persons a year, mainly from Ende. At 23,500 rixdollars, slaves were their main imports. In outgoing commodities, Malays were strong in rixdollars, almost 9,500, in Chinese earthenware, almost 17,000 pieces, and in textiles, about 2,350 pieces, the most important of which were Chinese linen and Indian cloth.

In the 1770s and 1780s the Company's Subjects succeeded in increasing the average volume of their ships from about 3 to 6 *last*, thereby somewhat repairing their 1760s image of being numerous but relatively 'poor'. However, the commodities they carried indicate that this improvement was slow and rather limited (Table Z). Their 1770s imports of rice decreased from over 1,500 to less than 1,000 *pikul* and of trepang from about 950 to 500 *pikul*. Textile exports fell from 1,400 to 1,200 pieces. It should be noted, however, that during the 1770s the number of Company's Subjects' skippers who appeared in the registers was only about half that of the 1760s (Table J, K). Besides the Company's Subjects there were other active groups of Sulawesians who deserve our consideration, including the Galesongers, as their share in shipping had become relatively significant. The Galesongers usually only called in at Makassar to obtain a sea pass to travel to places in the Flores Sea (see pp. 57-8), so they are almost always recorded as departing and hardly ever as arriving. Generally speaking, their 1770s cargoes were rather undifferentiated, consisting mainly of rixdollars up to an average of more than 3,600 per annum.

During the 1780s the Company's Subjects could barely maintain their position in trepang imports, while Chinese Peranakan skippers brought in increasing amounts, over 600 *pikul* per year, worth about 15,500 rixdollars. In fact, Chinese Peranakan trade was booming in the 1780s, probably outperforming their Sulawesian colleagues, perhaps because of closer ties with the full-blood Chinese community. Nevertheless, the Company's Subjects' imports of rice rallied to almost 1,700 *pikul* in the 1780s, up from about 1,000 a decade before. At the same time they also claimed a share of raw cotton imports, up to almost 600 *pikul*. For outgoing cargoes, they seem to have become more dependent on rixdollars, carrying almost 6,500 per annum. This trend was also visible among Galesongers and Chinese Peranakan, with levels of about 4,700 and 8,000 rixdollars, respectively. The textile exports of the Company's Subjects remained more or less stable with about 1,300 pieces. The big difference with earlier decades was that outgoing Sulawesian cloth no longer played an important role, having been replaced by Chinese linen and Indian textiles. Chinese Peranakan excelled in textile exports, more than double the number shipped by Company's Subjects.

Table 29. Estimated annual average value of trade of selected groups of private sector skippers, in rixdollars, percentage between brackets

	1760s		1770s		1780s	
Chinese, Amoy excluded	185,500	(42)	136,500	(24)	232,000	(24)
Chinese Peranakan	35,500	(8)	23,000	(4)	62,000	(6)
Burgher	42,500	(10)	59,000	(11)	64,500	(7)
Malay	51,000	(12)	52,500	(9)	129,000	(13)
Company's Subject	56,000	(13)	45,000	(8)	52,000	(5)
Other groups	68,000	(15)	59,000	(11)	94,000	(10)
Total, Amoy included	442,000	(100)	557,500	(100)	959,500	(100)

Table 29 shows the value of trade in the second half of the eighteenth century. 'Other groups' covers Buginese, Wajorese, Galesongers and unlabeled skippers; in fact, practically all the 'Others' were Sulawesians, just like the Company's Subjects. Trade turnover was generally much higher than in the 1720s and there were considerable differences in the relative strength of categories (Figure 7). First, whereas in the beginning of the century the Nanyang Chinese handled less than one-quarter of the trade, by 1770 this had doubled to almost half, because of the Amoy connection. When the junk was sailing regularly, as in the 1770s and 1780s, the Amoy traders and the Nanyang migrants each took half of the Chinese share. This Chinese share in trade was roughly the same as their proportion of shipping volume (see pp. 59-60; Table 4). One could say that in the course of the century the Chinese were the main winners. Second, although in absolute terms there had been some growth, the share shipped by Sulawesians had declined from about half in the 1720s to a quarter by 1770. Consequently, the Sulawesians had lost ground and it seems they remained under pressure in the 1780s. As for the Company's Subjects in particular, their share in trade was generally far smaller than in shipping volume. As such, they were the opposite of the efficient Wajorese of the beginning of the century. Third, the Burghers, whose trade was worth a quarter of the 1720s total, were, like the Sulawesians, continually falling behind. Their only consolation was that by the end of the century they had completely abandoned their previously uneconomical use of ships' space.

Skippers of the early and late eighteenth century: some examples

To highlight certain aspects of trade in eighteenth-century Makassar two sample groups of skippers have been followed in detail, 16 from the 1720s and 12 from the 1780s. Since they were among the most active skippers they

are not entirely representative, but their stories provide solid insights into commercial practice.

The Burgher Pieter Alexandersz sailed Hendrik Zandijk's *pencalang* of 15 *last*, with a crew 15 to 20 strong, on the Batavia route from late 1722 to the beginning of 1724. On his two outward-bound voyages he carried 100 to 200 *pikul* of bulk goods, mainly deer meat, kacang – a sort of beans – and wax, as well as a few slaves. These cargoes might have been worth between 1,000 and 2,000 rixdollars. His first return-cargo consisted of unimpressive quantities of arrack, palm sugar, salt, French wine, Chinese tobacco and betel-boxes, while iron, cane sugar and more than 4,600 cans of arrack made up the second. The value of these return-voyages probably did not exceed 1,000 rixdollars. The reason for the concentration of drink on board was that the owner, Hendrik Zandijk, was one of Makassar's tax farmers for alcoholic beverages (VOC 1995:70). For the rest of 1724, however, Pieter Alexandersz worked the Bima route in his own smaller *pencalang*, with 4 *last* and 11 crew, sailing out with victuals only, and returning with about 100 *pikul* of rice, worth the same number of rixdollars.

Thomas Carper, the captain of Makassar's Burghers, was one of the most active skippers during the 1720s. Within a period of four years he made eleven voyages in his 45 *last chialoup*, crewed by 15 to 20 hands. In the first three years he was mainly involved in the Ambon trade, occasionally connecting to Semarang. His cargoes were rather undiversified, consisting mainly of some 1,100 to 1,200 *pikul* of bulk goods, about three-quarters rice and one-quarter salt. These goods, probably worth over 1,000 rixdollars, were generally obtained from Semarang and taken on to Ambon. Consequently, Carper's commodities were mainly in transit at Makassar. He usually shipped out to Semarang with victuals only and on his way home from Ambon carried nothing at all. He probably took relatively large sums of money to Semarang to purchase his cargo and also brought money back from Ambon after selling his goods there. In October 1725, Thomas Carper decided to go to Batavia, with no recorded cargo except for 10 slaves, worth about 400 rixdollars. Six months later, in April 1726, he was back again with a tremendous variety of commodities, including salt, planks, arrack, European beverages, earthenware, tobacco pipes and Indian cloth, mainly *gerasses*. The total value of this return-cargo probably exceeded 1,800 rixdollars.

Another Burgher skipper was Anthonij Michielsz, sailing a *chialoup* of 25 *last* with a crew of 15 to 25. Like Thomas Carper, Michielsz also specialized in the Semarang-Ambon route. The value of his outgoing cargo to Ambon was usually about 750 rixdollars. Once during these four years, he also made a voyage to Batavia with goods worth about 1,000 rixdollars. His return-cargo, also of about 1,000 rixdollars, was not as rich as that of Thomas Carper. Such an occasional change from the rather boring Semarang to Maluku run was

not for everybody. A Burgher skipper like Pieter Fransz was almost a commuter, making five journeys in three years, either to Semarang or Ambon and Banda. From the end of 1723 onwards, he was the skipper for Maria Jansz, widow of Cornelis Hardenberg the elder, sailing her 35 *last chialoup* with a crew of about 25. From Semarang he used to call in at Makassar with almost 900 *pikul* of rice, worth about the same number of rixdollars, before continuing east to Maluku. Coming back he carried almost no commodities. In 1730 Pieter Fransz's career ended miserably, when his *chialoup* was shipwrecked on a voyage to Banda. There were no survivors among the 24 persons on board (VOC 2163-2:39).

Leaving the Burghers, our first Chinese skipper is Limnauko, who carried rice to Banda in 1722-1723, preceding Pieter Fransz as skipper on the *chialoup* of Maria Jansz, widow of Cornelis Hardenberg the elder. In the beginning of 1724 Limnauko obtained his own ship, a 30 *last chialoup* with a crew of about 20, which he also used on the Semarang-Moluccas route with an occasional excursion to Batavia. He usually took about 750 *pikul* of rice to Maluku. His goods on one of his Batavia-bound voyages were just over 100 *pikul* of marine produce, trepang and agar-agar, valued at more than 500 rixdollars. His first return-cargo from Batavia consisted of 25 *pikul* of Chinese tobacco, some tea, pans, more than 500 *gerasses* and 3,200 boxes of an unknown sort. All this must have been quite valuable, probably up to some 3,000 rixdollars.

Another Chinese skipper, Tsjakeenko, who also sailed his own *chialoup* of 30 *last* with a crew of 15 to 25, was similarly specialized in the Moluccan and Batavia trade and so carried similar commodities. Semarang was not on his list. On the route to Maluku he usually carried about 750 *pikul* of rice and on trips to Batavia, which he made three times in the period under consideration, he mainly shipped marine produce, typically some 100 to 200 *pikul*, worth over 500 rixdollars. The commodity packages he brought back from Batavia could be rather varied or fairly simple. The first return-cargo was the most complex, with 18 different loads, the most important being 7,000 pieces of Chinese earthenware, more than 550 *gerasses* and 17.5 *pikul* of Chinese tobacco. On the second voyage home he carried, inter alia, 1,000 pieces of earthenware, fewer than 300 *gerasses* and 25 *pikul* of Chinese tobacco. The third cargo was meagre in comparison, with no earthenware or textiles, the only positive development being a larger load of Chinese tobacco, namely 40 *pikul*. The average value of these three return-cargoes was about 3,000 rixdollars.

From these examples, it is obvious that the Batavia trade, particularly incoming to Makassar, offered much better cargoes than the Java to Moluccas route, which was essentially a less solid one-way traffic. However, it is also clear from the above that such rich cargoes were by no means guaranteed, though it seems that Chinese traders were more successful in obtaining them than Burghers.

There were also skippers who were entirely specialized on the Batavia route, for example the four Wajorese Latanie, Toasie, Toesie and Tohoema. In most of the listed years Latanie made one voyage to the VOC capital, sailing vessels belonging to Makassar-based Wajorese. First Latanie sailed Todawang's 4 *last pencalang*, then Toaba's 10 *last gonting* and, finally, twice, Tomoena's 3 *last gonting*. Toasie also made four voyages, each one in a different *gonting*. The first was a 3 *last* ship of the Wajorese Amanna Radja, the second at 10 *last* belonged to Toiga, listed as Wajorese by the harbourmaster, but elsewhere known as a Moor Mardijker (VOC 1995:97). Toasie's third command was the Burgher Joost Abrahamsz' 5 *last gonting*, while the final voyage was made in his own ship of 6 *last*. His compatriot Toesie went to Batavia three times after 1724, always in his own 6 *last gonting*, while the last of our Wajorese quartet, Tohoema, made three voyages in the first three years of the block. The first two were in a 6 to 7 *last gonting*, owned by the Wajorese or Buginese Tottie, the final one in a *gonting* of 6 *last* owned by the same Todawang for whom Latanie also sailed.

These four skippers all had remarkably numerous crews, of 25 to 30, comparable to those of the Burghers and Chinese, although these last had much bigger ships. But, as we have noted earlier, Wajorese cargo composition tended to be both varied and stable in numbers of loads. This and the rather good performance of Wajorese traders in general, might be because their voyages tended to be concentrated efforts by small groups of cooperating traders rather than large-scale endeavours by individual businessmen. Such a collective unit, provided there was enough capital, was apparently much more capable of generating 'rich' cargoes than single merchants. This view is confirmed by a VOC observation in 1716, which closely resembles the picture given in Amanna Gappa's law-code, that the tendency to have relatively large crews was because many a Wajorese skipper could only make a profit if he acted as a freighter for both passengers and goods, asking 2 rixdollars from each passenger and 5% on the commodities. Passengers, sometimes travelling with their own merchandise, often registered as ordinary sailors, in particular if they intended to make the return-voyage. Some of these traders were accompanied by a trusted slave, who was also counted as a crew member (VOC 1894:59-61; Matthes 1869:70-3).

Considering cargoes, we see Latanie departing Makassar with some 25 to 50 *pikul* of bulk goods, mostly rice but also beans, as well as about 100 pieces of Buginese cloth and, occasionally, a few slaves, total freight value averaging more than 300 rixdollars. On his first arrival back from Batavia, his most important commodities were 2,000 bowls and 160 *gerasses*. In later years, earthenware was no longer carried, but the number of Indian textiles increased to almost 450 on the second and third voyage and more than 300 on the fourth. *Gerasses* were always most important. The average value of the return-cargoes

exceeded 1,250 rixdollars. Toasie was not so stable in his *pikul* exports, but, on the other hand, he was more constant in exporting about 5 slaves at a time, as well as an average 100 pieces of Buginese cloth. These cargoes would probably make over 350 rixdollars. In his first year, like Latanie, Toasie brought in 2,000 bowls. However, from the beginning his imports of Indian textiles were more substantial than those of Latanie, exceeding 400. In his second, third and fourth voyage he brought home 500, more than 400 and almost 450 pieces, respectively. During this last voyage Toasie also imported lacquered boxes. Such return-cargoes must have been worth more than 1,750 rixdollars.

Toesie, who entered the scene one year later, was, as far as *pikul*-goods exports were concerned, mainly involved with marine produce, such as trepang and agar-agar, some 50 to 75 *pikul* altogether. He carried no slaves and barely averaged 50 pieces of Buginese cloth per trip. The average value of his exports was about 400 rixdollars. However, Toesie's Indian textile imports were rather impressive, namely 340, 1,150 and 600 pieces of *gerasses* in different sorts and sizes, chintzes and *sologesies*, worth some 1,500 rixdollars. Tohoema, our final Wajorese, did not export *pikul*-goods in any sizeable quantity; his only important merchandise being Buginese cloth, almost 200 pieces on each voyage. The bulk of his imports were Indian textiles once more, about 550 pieces at a time. An average outgoing cargo was worth 250 rixdollars, an incoming one more than 1,600.

So far we have been focusing on the Batavia route, but did Wajorese or Sulawesians in general play such a prominent role on other routes as well? To try and answer this question we have followed six other skippers, the Wajorese, sometimes also labelled Buginese, Tonio, Tosaleng, Tottie and Toserang, and the Makassarese Mabela and Njampa. The first two and the last two had their own *pankor* of 2 to 3 *last*, while Tottie and Toserang sailed *gonting* on behalf of others. At first, Tottie skippered a 4 *last* vessel, owned by To Alie, a Moor Mardijker (VOC 1995:97), but during 1726 he seems to have moved to his own *gonting*, a bigger one at 6 *last*. In the beginning Toserang sailed Aru Cajoe's 3 *last gonting*, later he sailed the Wajorese Todalima's 5 *last* vessel, which he himself might have acquired in the course of 1724. Towards the end of 1725 Toserang went to Johor in the 8 *last gonting* of the Wajorese Tosawa; he then vanishes from the records. Tottie usually sailed with crews of 15 and 20 hands, Toserang with 10 to 15, while the *pankor* were typically manned by 7 people, except that of Tonio, who had a crew of about 13. Tottie and Tonio, with relatively numerous crews, were the only sample skippers specialized in the Semarang connection. The others were seen in the Makassar Straits and the Flores Sea.

We will begin our discussion of the non-Batavia routes with Semarang, to which port individual skippers could make one or two trips per year. One of the striking differences between Tottie and Tonio and the Burgher

and Chinese skippers described above, was that the Sulawesians did not carry just victuals or money. They always tried to depart with commodities, although it is possible that money was transported as well. Consequently, at first sight the Sulawesians' Semarang trade seems to have had a more rational basis than that of the Burghers or the Chinese. Their Semarang-bound cargoes consisted of rope, coconut, wax and a few other goods. In Tottie's case the number of coconuts sometimes exceeded 1,000. However, these were not expensive cargoes, fetching less than 100 rixdollars. The most prominent return-load was Javanese tobacco; no rice or salt was carried. Tonio carried home some 40 to 60 *pikul* of this tobacco, while Tottie brought some 50 to 100 *pikul*. The worth of their cargoes varied between about 400 and 600 rixdollars, respectively. The Semarang trade seems to have generated a level of value of only one-third to one-quarter of the Wajorese commerce with Batavia. However, the ships on the latter route were about twice as big as those on the former, so Semarang's results were actually not bad.

The Wajorese or Buginese Tosaleng from our sample was recorded on many routes. In 1724 he sailed to Banjarmasin carrying a few commodities, but in no great quantities. Coming back, he brought some pans and Chinese earthenware as well as 400 bundles of rattan, which all in all probably would have fetched no more than 150 rixdollars. Tosaleng's cargo, however, was not typical of Buginese or Wajorese on the Banjarmasin route. Toserang, a Wajorese who made three trips there, presented quite a different profile. On going to Banjarmasin he sometimes carried rice, up to 50 *pikul*, as well as 150 to 250 pieces of Buginese cloth, average value being about 100 rixdollars. Toserang's return-cargoes showed a great deal of diversity. Chinese earthenware in different sorts and sizes dominated, with 2,500 pieces on the first voyage, 1,600 on the second and 5,000 on the third, averaging almost 500 rixdollars in value. The two sample Makassarese skippers' record was unimpressive. Njampa, who specialized in the Makassar Straits trade, sailing to Pulau Laut and Pasir, was the best of the two, managing to exchange coconuts, worth only a few rixdollars, for rattan, up to some 200 bundles at once, making about 50 rixdollars. Every year his compatriot Mabela went to and from Sumbawa, with no cargo at all or only victuals.

Given the high degree of 'Sinification' of the maritime sector during the last part of the century, it will be no surprise that the 1780s sample of skippers included many a Chinese, two of whom specialized in the Batavia route, namely Soeyamko and Tanmasing, both sailing *paduwakang* of about 8 *last* with typical crews of 20. However, when they occasionally sailed to Sumbawa, they had only 12 to 14 people on board. The other four Chinese skippers in our sample traded primarily in Makassar's southern hemisphere. Kouwtoko and Tjoakonseeng took *paduwakang* of 8 to 10 *last* to Sumbawa, with between 10 and 20 hands. Then there was Ongkauko, who sailed to sev-

eral destinations, of which Buton was the most important, in a *paduwakang* of about 7 *last* with a crew of approximately 11. Tantjanking, our final example, traded mainly with Bugis, also in a *paduwakang* of about 7 *last* with a crew averaging 10 men. The sample further contained three Malay skippers and three Company's Subjects. The Malays were Intje Bora, Maro and Intje Samba, and the Company's Subjects Bappa Bimbie, Poea Basse and Poea Saida, all of whom sailed *paduwakang*. It seems, however, that in the course of time these skippers regularly changed vessels. Consequently, Intje Bora and Bappa Bimbie, who sailed several routes in the southern hemisphere, had ships of 2 to 7 and 5 to 8 *last*, with crews of 8 to 16 and 10 to 15, respectively. With comparable vessels and crews, namely 4 to 5 and 4 to 8 *last*, 6 to 15 and 10 to 13 hands, Maro and Intje Samba specialized in Sumbawa, as did Poea Basse and Poea Saida, with much the same equipment: ships of 4 to 7 *last*, crews of between 7 and 11.

Comparing cargo composition on the Batavia and Sumbawa routes of our first two Chinese skippers, Soeyamko and Tanmasing, it has to be concluded that there was no direct link between their two destinations. Sumbawa was neither a supplier nor a distributory outlet for the Batavia voyage. Both skippers made the voyage to Batavia three times. Soeyamko took more than 260 *pikul* of trepang, agar-agar, karet and wax on his first trip there, only about 150 *pikul* of these on his second and on the third less than 50 *pikul* of wax and karet only. Instead, on this voyage Soeyamko concentrated on slave trading. While on his first and second journey he had only carried 6 and 5 slaves, respectively, on the last he had 26. A similar pattern of Batavia-bound exports was visible with Tanmasing, shipping more than 200 *pikul* of marine products and wax on his first voyage, 200 on his second and only 100 on his third. However, Tanmasing had always been well entrenched in the slave trade, the numbers carried being 16, 39 and 28, respectively. The average value of Soeyamko's cargoes was about 6,000 rixdollars and those of Tanmasing at least 4,000.

Soeyamko brought various *pikul*-goods back from Batavia, to a maximum of 125 *pikul*, mainly metal, in particular iron. Arrack was the most important liquid, the load reaching 7,200 cans on the second voyage, while Indian textiles were also on board, between 400 and 900 pieces, mainly chintzes. Tanmasing carried less *pikul*-goods to Makassar, 70 maximum, most importantly Javanese tobacco, iron and shellac. His first return-cargo was relatively poor, while his second and third were much better, although in liquids and Indian textiles he was far behind Soeyamko. Only for the third voyage was cloth recorded: 400 chintzes. Soeyamko's incoming cargoes were probably worth more than 6,000 rixdollars, while those of Tanmasing were probably no more than 2,000. These two Batavia-faring Chinese sailed the route with vessels of about one-third the size of those of the Chinese and the Burghers

in the 1720s, but the cargo values were higher. The most improvement was to be seen on departure to Batavia; in the case of the examples mentioned above this was mainly due to trepang and slave exports.

As mentioned previously, Kouwtoko and Tjoakonseeng were Sumbawa specialists. The first made six return-trips in three years and the second eight, usually taking about four different commodities and coming back with two. Kouwtoko carried small quantities of expensive products, such as raw silk, woven silk and gold thread, though once he took 1,000 plates as well. He returned with 100 to 200 *pikul* of rice and raw cotton, usually in a ratio of 2 : 1, except for the last voyage, when all he shipped was 100 *pikul* of dry meat. On another voyage there were also 40 pigs on board. Tjoakonseeng exported smaller quantities of raw silk than Kouwtoko, taking instead finished textiles, either Chinese linen or Indian fabrics, up to 70 pieces on average. On one trip he also carried a very substantial amount of gold thread. Return-cargoes, in particular the first six, were 180 to 240 *pikul* of rice and raw cotton in more or less equal quantities. For the seventh and eighth voyage he seems to have used a vessel twice the previous size, transporting 500 to 600 *pikul*, about 90% of which was rice and only 10% cotton. Between the seventh and eighth voyage Tjoakonseeng made one trip with this new vessel to Surabaya. The average value of outgoing cargoes to Sumbawa was over 400 rixdollars for Kouwtoko and about 600 for Tjoakonseeng; returning home the former carried commodities worth over 350 rixdollars, the latter of more than 600.

Turning to the last two Chinese skippers, we begin with Tantjanking, who made three complete voyages to Bugis, always carrying a few *pikul* of Chinese tobacco. On the second voyage he added 2,000 bowls and on the third 70 *pikul* of raw cotton. Return-cargoes were either trepang, up to 30 *pikul*, or slaves, about 21. Outgoing cargoes were valued at over 350 rixdollars, far less than the incoming at more than 1,100. Ongkauko was mainly a Buton-bound sailor, making three complete voyages. The constant factors in his exports were a few chests of gold thread, 40 to 80 pieces of Chinese linen and 250 to 500 pieces of iron goods, from pans to bush-knives. The second and third voyage were more valuable than the first. In addition to the exports mentioned above, on his second trip Ongkauko took 8,000 bowls and 500 rixdollars and on the third 5,000 bowls and 5,000 plates. The average value of the cargo was about 1,100 rixdollars. Imports were less impressive, but still considerable. From his first voyage he brought home 30 *pikul* of trepang and 5 slaves, from the second 60 *pikul* trepang and 1 slave and, finally, from the third voyage nothing at all. Cargo average value was almost 900 rixdollars. Between his first and second voyage Ongkauko went to Semarang. Tantjanking also deviated from his usual Bugis-bound route by going to Bonerate in 1789, taking 1,200 rixdollars and some odds and ends, and returning with 30 *pikul* of trepang, worth almost 750 rixdollars. On the

basis of these examples, it seems that, for the Chinese, the Sumbawa trade was less rich than that to Bugis, Buton or Bonerate.

Having mentioned Bonerate, we now consider how the Malay Intje Bora and the Company's Subject Bappa Bimbie fared on this route. Intje Bora made a round-trip to Bonerate in 1787, while in 1789 he left for Bugis but returned from Bonerate. Bappa Bimbie went to Bonerate in 1788. In 1787 Intje Bora took 100 pieces of Chinese cloth, 100 pieces of Chinese linen and a few *pikul* of gambier, which together might be worth up to 750 rixdollars, to return with a cargo of wax, agar-agar and slaves, worth about 650 rixdollars. In 1789 he left Makassar with Javanese and Chinese tobacco as well as 200 mats for Bugis, which could have fetched almost 500 rixdollars; in return he brought home from Bonerate some resin and again slaves, to the value of 300 to 400 rixdollars. It is worth mentioning here that Intje Bora had made two other trips in 1788, one to Bugis and another to Sumbawa. In 1786 and 1787 the other skipper, Bappa Bimbie, had visited Sumbawa, Buton and Bugis, with varying degrees of success, before turning to Bonerate, to which he mainly carried Chinese earthenware and bush-knives. The value of the cargo was about 100 rixdollars. The main return-commodity was the vegetable dye-stuff *bengkudu*, up to 40 *pikul*. Because prices for this dye-stuff are not available we cannot estimate value for this cargo.

The Malay skippers Maro and Intje Samba again primarily traded with Sumbawa, with the former making four round-trips and the latter three. These Malays' cargoes were not as complex as those of the Chinese described above, while volume also seems to have been smaller, although this certainly did not mean that their cargoes were any less precious. On the contrary, measured in value, Maro and Intje Samba did better than Kouwtoko and Tjoakonseeng. Maro is recorded as having departed three times with rixdollars, varying from 500 to 1,500, occasionally supplemented by some other commodities. The fourth time he departed with nothing at all. The average value of these cargoes was almost 800 rixdollars. Intje Samba sailed out on his first voyage with bowls and plates and Indian cloth, on the second with only 1 *pikul* of opium and on the third with no more than 200 rixdollars. Nevertheless, his outgoing cargo values averaged about 550 rixdollars. The Malay skippers' return-cargoes were marine produce, rice and slaves. From his first three voyages Maro brought back trepang, between 35 and 80 *pikul* each time, while from the fourth he came home with about 50 *pikul* of rice. Intje Samba combined slaves and rice. On his first return he imported 19 slaves, on his second about 50 *pikul* of rice and on his third 100 *pikul* of rice and 8 slaves. The average value of Maro's as well as Intje Samba's incoming commodities exceeded 1,000 rixdollars.

Our last sample skippers are Company's Subjects. Poea Basse made five more or less complete voyages to and from Sumbawa in a year and a half,

during 1788 and 1789. 'More or less' because the first time he departed for Sumbawa but returned from Ende. In about the same period Poea Saida made three round-trips, also to Sumbawa. Poea Basse usually left Makassar with about 100 rixdollars, except on the first voyage, when he carried 500. There was also one departure in which no cargo at all was recorded. From the first trip, when he left with the 500 rixdollars and returned by way of Ende, he came back with his most expensive cargo, 3,000 cans of coconut oil and 21 slaves. Other return-cargoes were trepang or rice or even nothing whatsoever. Poea Saida, on the other hand, always sailed with commodities, such as gambier, Javanese tobacco and bowls and plates, rather than with money. He returned from his first voyage with 8 slaves, from the second with 6 slaves as well as 60 *pikul* of rice and from the third with about 75 *pikul* of rice and no slaves. If we omit Poea Basse's first journey, his outgoing cargoes were typically worth no more than 100 rixdollars, while the incoming reached about 150 in value. Poea Saida did no better on departure, but on arrival he realized on average about 350 rixdollars. These examples reinforce the impression that the Company's Subjects' skippers were less successful than their Chinese or Malay colleagues.

Summary

In the early eighteenth century the backbone of Makassar's trade, in terms of value, consisted of slaves, Indian textiles and tobacco, Chinese as well as Javanese. However, sailing without cargoes or under-utilization of space was also widespread, particularly on routes to the south and east of Makassar, namely to certain parts of Nusa Tenggara and Maluku and, to a lesser degree, to Semarang. In this period Nusa Tenggara did not have much more to offer than slaves, while the trade in rice and salt from Semarang via Makassar to Maluku was basically one-way, as there were hardly return-commodities. The Burghers, sailing *chialoup* for this bulk trade, suffered most from this inefficient use of carrying capacity. In the meantime, Wajorese skippers, often co-ordinating groups of small traders, used their ships most effectively, dominating the Indian textile trade with Batavia. From the point of turnover value, the VOC capital was by far the most important trading partner.

This structure broke down in mid-century. Political conflict caused the Wajorese to leave Makassar in the 1730s and 1740s. Moreover, the trade from Semarang to Maluku declined and finally fell victim to its own weakness. On the other hand, from about the 1730s, China's expanding demand for trepang started to stimulate Makassar's trade, while later on the post-1746 annual junk from Amoy generated unprecedented growth for the rest of the century. This junk trade created new opportunities, in particular in Makassar's

southern hemisphere, where most trepang was found. Consequently, former backwaters like Sumbawa, Buton and Bonerate developed into thriving secondary ports. Sailing with empty holds became increasingly rare. Shortly after 1770, Amoy surpassed Batavia as Makassar's main trading partner. The Chinese share in Makassar's trade increased to about 50%, while the proportion held by both Burghers and Sulawesians stagnated. The last refuge of the Burghers was the slave trade, which was still considerable. In the wake of the Chinese other groups such as the Malays and, to a lesser extent, Chinese Peranakan, emerged in force.

CHAPTER VI

Conclusion

In the preceding chapters we have unpacked the Makassar harbourmasters' registers and then recombined their component elements in order to identify trends, patterns and possible implications. We have restricted our comments on the results of this intensive exercise to the minimum and have thus produced, in effect, a source in itself, which will hopefully help other researchers to formulate their own questions. Of necessity, the preceding chapters are closely reasoned and in this conclusion we will summarize the main findings of the individual chapters, before commenting briefly on how this material may modify some current perceptions of eighteenth-century Indonesian maritime history.

From the signing of the Treaty of Bungaya in 1667 the VOC authorities in Fort Rotterdam tried to control private overseas shipping and trade in and around Makassar. Their main instrument was the pass system, which the VOC's harbourmasters used to confine navigation to areas regarded as unthreatening to the Company's monopoly of trade in products such as spices and imported Indian textiles. Strict observance of these regulations was required by the VOC's High Government in distant Batavia. The officials of Makassar's own Fort Rotterdam were often more lenient, aware as they were of the restrictions' negative consequences for the local economy. Besides, they might well be involved themselves in trade. In any case, a complete implementation of the pass system was impossible. The VOC was unable to keep an eye on skippers and traders once they had sailed over the horizon to the Java Sea, Makassar Straits or Flores Sea, with their extensive waters and many hospitable shores. The Company tried to counter commercial activities it deemed undesirable by diplomatic manipulation of local rulers and/or the despatch of patrol boats. On the South Sulawesi peninsula itself, however, powerful 'allied' princes regularly questioned the right of the VOC to control shipping and trade, while regional ports other than Makassar maintained their own contacts with the outside world. Competing rulers were also well aware of the political dividends of channelling trade. Further research is needed, particularly to unravel patterns of non-VOC sanctioned trade between Sulawesi and English country-traders, operating from India.

Besides issuing and checking passes Makassar's harbourmaster also collected import and export duties. From 1745 onwards customs were farmed out, usually to a Chinese or a Malay; competition between the two communities for this lucrative monopoly could be fierce. However, although this new tax policy generated slightly more income than the old, strictly speaking, Makassar remained financially a losing proposition for the VOC. The other main source of revenue was the Company's own trade in Makassar, mainly imports of Indian cloth; but this was relatively insignificant and, moreover, in decline during the eighteenth century. The weakness of VOC trade was not reflected in traffic volume, which was quite substantial, as the huge East Indiamen carried supplies for the local garrison, while Makassar was also a port of call for these vessels on the routes to Maluku and Bima. The VOC's own role in shipping greatly declined after 1780, following the Fourth Anglo-Dutch War and the consequent alarming shortage of vessels.

The registers show that during the eighteenth century the private sector's ship types underwent a process of 'localization', exemplified by the growing importance of the locally produced *paduwakang* and the disappearance of non-Sulawesian vessels, such as the *chialoup*. Actually, this was a change from a somewhat larger to a medium-sized vessel. Within the category of Sulawesian types, this medium-sized *paduwakang* replaced the smaller *pankor*. These developments reflected both VOC policy, attempting to limit the import of non-Sulawesian vessels, and shifts in trading networks. During the course of the century there was a significant decline in contacts with Maluku, while those with Makassar's southern hemisphere, the Flores Sea, increased dramatically. This re-direction of routes was paralleled by changes in the body of skippers. In the beginning of the century the Burghers were most prominent, later to be displaced by Chinese skippers, who also captured a share of the market from Sulawesian seafarers. This 'Sinification' of shipping was closely linked to the emergence of the direct trading link with Amoy from 1746 onwards.

Turning to a chronological overview of the broad structure of maritime private trade in Makassar we see the following. In the 1720s relatively large quantities of Indian cloth were imported from Batavia and of Javanese tobacco from Semarang. The most notable export was that of locally produced rice to Ambon and Banda, constituting the dominant bulk trade. In terms of value the leading import was Indian cloth, while Sulawesian rice led exports. It should be noted, however, that many a ship sailed without cargo. Underutilization of space on board seems to have been widespread, particularly on the routes to and from Nusa Tenggara, to Semarang and from Maluku. The Burghers, sailing relatively spacious *chialoup* to Java and Maluku, were the least efficient in using carrying capacity. Wajorese skippers, often acting together with other small traders, worked their ships more effectively,

dominating the Indian textile trade from Batavia. In terms of value, Batavia was by far Makassar's most important trading partner. By the middle of the century this structure had changed considerably. Political conflict caused the Wajorese to leave Makassar in the 1730s and 1740s and with them the large turnover of Indian cloth disappeared. Political turmoil and the lack of suitable imports from Maluku also sealed the fate of Makassar's export of locally produced rice. The inefficient Burgher skippers in their *chialoup* were the main victims of the decline in the Maluku route.

A totally different picture of private trade emerged from the harbourmasters' registers of the 1760s and 1770s. Batavia was then supplying large volumes of arrack, while rice and raw cotton were coming in from Sumbawa and trepang from other shores surrounding the Flores Sea. Trepang was re-exported to China, either by the post-1746 direct link to Amoy, or indirectly, by way of Batavia. The main bulk cargoes were arrack imports and trepang exports. Measured in value trepang was the most important commodity, both incoming and outgoing. In essence, the mid-century revealed a gradual shift from the export of local produce to a transit trade exchanging marine products for Chinese commodities. The Amoy connection was central to this transformation. It created new opportunities, in particular in Makassar's southern hemisphere, where most sea products originated. Sumbawa, Bonerate, Bugis and Buton were thus becoming important secondary ports. Sailing with empty holds was increasingly rare, so it could be said that the medium-sized *paduwakang*, which had replaced the too small *pankor*, were being used more efficiently than the bigger *chialoup*. Shortly after 1770, in terms of value, Amoy had surpassed Batavia as Makassar's main trading partner.

The 1780s, continuing these trends, generated a real boom. Substantial volumes of arrack came in from Batavia as did, once again, Indian cloth, while Javanese tobacco arrived from Semarang. Rice and raw cotton were imported from Sumbawa, trepang and coconut oil from the shores of the Flores Sea. Outward-bound were agar-agar and slaves to Batavia, trepang and rattan to Amoy, rixdollars and Chinese bowls and plates to Sumbawa. Bulk imports were arrack from Batavia and bowls and plates from Amoy, their exported counter-parts being agar-agar, trepang and rattan. In value terms, trepang and slaves were the most significant commodities, both inward and outward bound. The 'Sinification' referred to above was also evident in commerce itself, as about 50% of goods were handled by Chinese merchants. Malays, following in their wake, became a major force. Although Sulawesian skippers still played an important part in the trade, in particular around the Flores Sea, as a group they never equalled the role of the Wajorese in the early 1700s. Slave exports to Batavia appeared to be the last stronghold of the once powerful Burghers.

The average number of private vessels calling in at Makassar throughout the century was about 500 to 550 each year, approximately equal to the estimate for pre-conquest Makassar in the 1660s. Unfortunately, nothing is known about tonnage before VOC domination. Eighteenth-century trends in annual average shipping volume were as follows. Between about 1725 and 1770 it declined from approximately 3,750 to 3,250 *last* and then, from 1770 to circa 1790, increased again to 5,500 *last*. The entire period, from 1725 to about 1790 showed a compound growth rate of 0.6% per year. In the period up to 1770 it shrank to about -0.3% and then grew to 2.6% per annum. According to our best estimates, the value of private trade almost doubled from 250,000 rixdollars in about 1725 to circa 550,000 around 1770 and then shot upwards to reach 1,000,000 around 1790. Over the entire period we reckoned that maritime commerce increased by 2.7% per year, although before about 1770 growth rates were somewhat lower, namely 2.1%. The apparently contradictory trends for the period 1725 to 1770, showing a declining merchant fleet and growing commerce, are clear indications of the fleet's overcapacity at the beginning of the century. After about 1770 trade growth achieved a compound rate of 4.0%. It might not be too bold to conclude that towards 1790 the total value of commerce, 1,000,000 rixdollars, must have exceeded that of the period before the conquest.

In conclusion, we would like to place the findings of this research in the context of other literature on the economic development of the eighteenth-century Malay-Indonesian Archipelago. There is next to nothing on growth rates, which might be compared with our estimated general averages of 0.6% and 2.7% for shipping and maritime trade respectively. Anthony Reid, who has contributed so much work on this period, has given some post-1750 figures, but only for Southeast Asian export commodities destined for the global market, such as pepper, coffee and sugar (Reid 1997b:74). Although these commodities are rather specific, nonetheless it is clear that, generally speaking, Makassar's development paralleled the growth of pepper, coffee and sugar taken together. This suggests that expansion was not restricted to Southeast Asian commodities favoured by Europeans. Indeed, the case of Makassar shows that this increase was also possible without the involvement of a 'dynamic' European element.

J.C. van Leur's seminal work might seem less relevant here as it mainly deals with the period before 1650. However, in his essay 'On the eighteenth century as a category in Indonesian history' he makes some pertinent observations (Van Leur 1955:268-89). Although Van Leur had very few studies available to help him to compare Indonesia's European and Asian sectors, nevertheless he felt able to reject the idea, already proposed by F.W. Stapel, that since the end of the seventeenth century the indigenous world had become 'impoverished', 'enfeebled', 'economically undermined' and 'politi-

cally second-rate'. In his opposition to 'the image of the dead seas' of eighteenth-century Indonesia, said to have been created by VOC monopolies and blockades, Van Leur emphasized both the existence of large-scale smuggling, in particular by corrupt VOC personnel, and the fact that outside the directly VOC-controlled areas Indonesian markets were very capable of absorbing an increasing stream of products from England and America. Consequently, he drew 'a gradually ascending line, a curve, climbing throughout the eighteenth century, and in the second half of the century soaring even more rapidly because of the input of stronger trade from Europe' (Van Leur 1955:270, 276, 279-80, 283). As already noted, in Makassar's case we found a similar rising curve, in particular from the middle of the century onwards. More importantly, this increase was not caused by trade inputs from Europe, but by demand from China. Our conclusions on changes in eighteenth-century Makassar shipping and trade is yet another telling illustration of Van Leur's axiom that the history of Indonesia, or indeed the rest of Asia, in this period transcends the history of the VOC.

Van Leur conceptualized his views on eighteenth-century Indonesian trade and society in the late 1930s, but it was not until 1981 that an original study on the maritime world of the Archipelago was published. This was Jim Warren's book on eighteenth and nineteenth-century Sulu. From our point of view, Sulu is particularly interesting, as it is located at the northern end of the maritime corridor linking the complex of the Java, Flores and Banda Seas on the one hand with the South China Sea on the other. Sulu probably preceded Makassar in its development as an entrepôt, where trading vessels from China collected forest and marine produce. Besides junks, the Sulu sultanate was sometimes visited by English country-traders, who came to load merchandise for their own dealings with China. Most of the sea and forest products traded came from the shores of the Sulu Sea, northern and eastern Kalimantan and northern Maluku. Sulu's networks closely resembled those of Makassar, in particular the connection with Amoy on the one hand and with the Flores Sea on the other. Another point of resemblance was Sulu's role as a slave exporter. However, some of Sulu's neighbouring communities specialized in supplying it with slaves through piracy, which consequently was much more prevalent in the Sulu zone than round Makassar. After 1800 slave exports from Sulu collapsed as most were required by the sultanate itself. A final point of resemblance between Sulu and Makassar was that trade with China eventually led to an intensification of Chinese roles in the internal economy (Warren 1981:6-12, 40-4, 67, 70-4, 126, 151-2, 161, 199).

Java's shipping and trade in the mid-1770s presented a very different picture. Unlike Sulu, Java's maritime sector operated in an environment politically dominated by a European colonial power. The simple fact that Batavia, the VOC's Asian headquarters, was located on Java meant that the

island rapidly became a supplier of goods for the global market. Moreover, the structure of Java's economy was quite different from that of Sulu and also from Makassar. Java's coastal economy was export-oriented agrarian, while eastern Archipelago exports progressively focused on the exploitation of marine and forest resources. Also, the European element was already predominant in Java well before the nineteenth century, in the guise of the VOC, which was itself heavily involved in shipping and trade. Makassar's maritime economy could have slid into a similar subordination, were it not for the fact that, in the second half of the eighteenth century, the Amoy connection revitalized Makassar's private trading sector. Java and Makassar also differed in their preferred ship types, with a diffusion of European sorts in the former, and a process of 'localization' in the latter, with indigenous models replacing European. There is one aspect, however, in which Sulu, Makassar and Java did not differ, notwithstanding their divergent political status and economic structure, namely in the growing relative importance of Chinese navigators and merchants (Knaap 1996:171-8).

In the early 1990s Anthony Reid assessed the early modern period for the *Cambridge history of Southeast Asia*. His evaluation was heavily coloured by his view of the mid-seventeenth century crisis that ended 'The Age of Commerce', Southeast Asia's presumed pre-colonial golden age. According to Reid, Southeast Asians lost contact with 'modernity', while Europeans and Chinese took the lead. The Chinese tightened their grip on navigation, basing themselves in European controlled centres of international trade for security reasons. Ultimately, a dualistic economy emerged (Reid 1992b:492-500). The fact that the Chinese also operated from indigenous ports, like Sulu, was overlooked. Five years later, following new studies on the subject, Reid was less pessimistic, suggesting that the weakening of the VOC and the Spanish Crown, from circa 1760 or 1780 on, enabled Southeast Asia trade to revive. English country-traders, American blockade-runners and Chinese immigrants provided the main impulse for this growth. Reid has even launched the idea of this being a possible 'Chinese century' in Southeast Asia (Reid 1997a:11-4). In this connection it is important to note Reid's study, with Radin Fernando, of shipping and trade in the Melaka Straits, which showed that from about 1760 on there was continuous growth, mainly fuelled by the English connection from Calcutta to Canton (Reid 1997b:62-8). This concept of a 'Chinese century' in Southeast Asia has not been Reid's alone. Carl Trocki, for example, has studied two types of related Chinese diaspora settlements, of merchants and labourers, which showed increased dynamism from the mid-eighteenth century; many of this immigrant groups came from Amoy (Trocki 1997:84-6, 89, 99).

Our study of Makassar confirms some of Reid's views. Chinese ascendancy in shipping and trade is indeed very important and may help explain

a number of other developments. However, this expansion not only weakened indigenous traders, the Sulawesians, but also the marginally European Burghers. The growth of the Chinese share in Makassar's shipping and trade was clearly connected to China's expanding demand for marine produce, in particular trepang. This Chinese role in Makassar was not part of the relatively new wave of migration from China, with groups of labourers settling in colonies, but had much deeper roots. Chinese traders had lived in Makassar long before any European, capitalizing on shifts in markets, politics and networks. Their later eighteenth-century resurgence should be seen as a continuation and expansion of their established role in a traditional merchant settlement, which in this case happened to be European controlled. Although indigenous traders in Makassar were under pressure, this can in no way be seen as indicating stagnation and 'fossilization' of Southeast Asians. A relative decline in an expanding economy can also represent absolute growth, while relegation to an apparently subordinate niche may in fact be a creative and successful adaptation to a new situation. Examples of this could be specializing in certain commodities or developing feeder networks with smaller ships, rather than undertaking long-distance trade. Innovation in ship types, symbolized by the rise of the *paduwakang*, show that Sulawesians were still quite capable of modernization. Moreover, the strong position of the Wajorese in the beginning of the eighteenth century is further proof that local communities could successfully continue their maritime activities even after a European colonial victory. The fact that the Wajorese subsequently vanished from our source, the harbourmaster's register, does not automatically mean that their vigorous trade ceased. They might simply have evaded European surveillance to pursue their fortunes on distant seas under the flags of independent princes. For while we must be grateful that the VOC's control mechanisms have enabled us to catch a glimpse of the thriving maritime world of eighteenth-century Makassar, we must not forget that this world continued to be part of a greater, but still largely unmapped, Asian universe.

APPENDIX 1

Weights and measures

The first word in the explanation gives the English equivalent, where one exists. Thereafter the meaning of the term as unit of measurement is explained for different commodities.

aam	aam, alm; liquid materials: 90 cans (*Verhandeling* 1786:339)
balie	-; rice: 0.6 *pikul* (*Verhandeling* 1786:341); cotton: equated with 1 *kranjang*; kacang: equated with 0.6 *pikul*; liquid materials: 45 cans (Knaap 1996:190)
bambu	bamboo; liquid materials: 3 cans (*Verhandeling* 1786:341)
bierpijp	pipe; liquid materials: 130 cans (*Verhandeling* 1786:356)
blasje	-; general: probably equal to 1 *balie*
boek	paper: 40 sheets (Knaap 1996:190)
bos	bundle; picis: probably equal to 1 *pakoe*; paddy: approximately 1/6 *pikul* (Liedermoij 1854:358); bowls: equated with a *nest*; bush-knives: equal to 1 *corgie* (Harbourmaster's specification 1766-67); plates: equated with 1 *nest*; gold thread: equated to 0.25 *kist*; rope: equated to 0.5 *pikul*; silk, raw: equated with 0.1 *pikul*
bosje	small bundle; silk, raw: equated with 0.05 *pikul*
bottel	bottle; liquid materials: 2 cans (Staring 1902:20)

bundel	bundle; linen, Chinese: equated with 1 *corgie;* silk, raw: equated with 0.5 *pikul*
bunkus	see bundel
corgie	corg; sugar, fine-grain: equated with 1 *kanaster;* tobacco: 8 *pikul* (Knaap 1996:190); bush-knives: equated with 20 pieces; cloth: 20 pieces (Knaap 1996:190); silk, raw: equated with 1 *bundel*
doos	box; gold thread: probably equal to a package of about 2 Amsterdam pounds in weight (Laarhoven 1994:125), which means that there were approximately 60 boxes to 1 *kist*
dozijn	dozen; general: 12 pieces
kan	can; liquid materials: 1.57 litres (*Maten* 1918:687)
kanaster	canaster; sugar, fine-grain: 3 *pikul* (*Verhandeling* 1786:341); tobacco: 3 *pikul* (*Verhandeling* 1786:341)
kast	case; gambier: equated with 1 *pikul;* opium: equated with 1 *kist;* tea: probably equal to 1 *kist;* knives: equated with 24 pieces; glass ware: equated with 24 pieces; gold thread: equated with 1 *kist;* rosewater: 50 cans (*Verhandeling* 1786:329); liquid materials: equated to 45 cans (Knaap 1996:191)
kastje	small case; opium: equated with 0.25 *kist;* gold thread: equated with 0.25 *kist.*
kati	catty; general: 1/100 of a *pikul* or 1.25 Amsterdam pounds (*Verhandeling* 1786:342)
kelder	cellaret; liquid materials: 45 cans (Knaap 1996:191)
kist	chest; opium: a little over 1 *pikul* (*Verhandeling* 1786:350); tea: equated with 1 *pikul;* tobacco, Chinese: equated with 1 *pikul;*

cloth: equated with 1 *pak*;
knives: equated to 24 pieces;
linen, Chinese: equated to 100 pieces;
pans: equated to 1 nest;
mirrors: equated to 144 pieces;
gold thread: equated with 1 *pikul*

koyan -;
rice: probably 27 *pikul* (*Verhandeling* 1786:343);
salt: almost 35 *pikul* (*Verhandelingen* 1786:344);
tobacco, Javanese: equated with 28 *pikul* (*Maten* 1918:688);
other products: equated to 30 *pikul*

kranjang basket;
tobacco, Chinese: 0.5 *pikul* (Knaap 1996:191);
tobacco, Javanese: 0.2 *pikul* (Knaap 1996:190-1);
plates: equated with 1 *nest*;
cotton: equated with 1 *pikul*;
radix china: equated with 0.5 *pikul*

laksa -;
general: 10,000 pieces (*Verhandeling* 1786:350)

last burden;
volume of ships: 4,000 pounds (Radermacher and Van Hogendorp 1779:65);
kacang: approximately 30 *pikul* (Knaap 1996:191);
rice: approximately 24.5 *pikul* (*Verhandeling* 1786:350, 355);
salt: almost 35 *pikul* (*Verhandeling* 1786:344, 350)

legger leaguer;
liquid materials: 360 cans (*Verhandeling* 1786:351)

nest nest;
bowls, bowls and plates, plates: equated with 15 pieces (Knaap 1996:192);
pans: 5 pieces (Knaap 1996:192)

pak pack;
opium: probably equal to 1 *kist*;
cloth, Chinese: in the case of *gingam* equated to 100 pieces;
cloth, Indian: in the case of *cassa* 100 pieces, of *gingam* 100 pieces, of *hamman* 100 pieces, of *muris* 100 pieces, of *salempore* 100 pieces, of *baftas* 80 pieces, of *guinees* 40 pieces (*Verhandeling* 1786:335, 354-5), of *karikam* 280 pieces, of chintzes from Surat probably 200 pieces (Laarhoven 1994: Appendix 1:18, 38);
silk, raw: 0.5 *pikul* (Laarhoven 1994:118)

pakje small pack;
silk, raw: equated with 0.25 *pikul*

pakoe	-; picis: a string of 1000 pieces (Blussé 1986:40)
pikul	picool; general: 125 Amsterdam pounds (*Verhandeling* 1786:355); oil, coconut: approximately 55 can (Liedermoij 1854:356); arrack: approximately 90 can (Koopmansboeken 16:31-12-1769); sugar, palm: probably about 500 balls (*Mindere welvaart* 1909:73); trepang: equated with 25 pieces; copperware in general: equated with 30 pieces; linen, Chinese: equated with 1 *kist*; other liquid materials: equated with 1 *ton*
pot	pot; opium: equated with 0.25 *pikul*; sugar, fine-grain: probably 0.5 *pikul* (Hooyman 1779:212); sugar, palm: 1/20 of a *pikul* (Knaap 1996:192) or 25 balls; liquid materials: 10 cans (*Verhandeling* 1786:356)
riem	paper: approximately 500 sheets (Knaap 1996:192)
stel	set; pans: equated with 1 *nest*
streng	skein; silk, raw: approximately 1/1850 of 1 *pikul* (Laarhoven 1994:118)
stuk	piece; trepang: as an average trepang was probably about 15 centimeters long and about 4 centimeters in diameter (Koningsberger 1904:42, 47-8), it is assumed that one trepang weighed about 2 Amsterdam pounds
susong	-; pans: probably equivalent to a *nest*
tempat	'place'; cotton: equated with 1 *kranjang*
ton	barrel; gambier: equated with 1 *pikul*; tea: equated with 1 *pikul*; knives: equated with 100 pieces; bowls and plates, plates: equated with 100 pieces; gold thread: equated with 1 *kist*; liquid materials: equated with 60 can (Knaap 1996:193)
tonnetje	small barrel; gold thread: equated with 0.5 *kist*
vat	barrel; knives: equated with 1 *ton*; liquid materials: equated with 100 can (Knaap 1996:193)

zak sack, bag;
rice: probably equal to about 1 *pikul* (Knaap 1996:193)

APPENDIX 2

Major statistical tables

A	Total number of private sector ship movements	183
B	Total number of VOC ship movements	183
C	Total volume of incoming and outgoing private sector traffic in *last*	184
D	Total volume of incoming and outgoing VOC traffic in *last*	185
E	Number of private sector ship movements per ship type, percentage between brackets (rounded-off)	186
F	Average number of crew and average volume in *last* of frequently occurring private sector ship types (rounded-off)	187
G	Volume of traffic according to private sector ship type in *last*, percentage between brackets (rounded-off)	188
H	Most common armament according to private sector ship type 1766-1769	190
I	Most common armament of *paduwakang* 1766-1769, 1774-1777, 1786-1789	191
J	Number of ship movements by private sector skippers according to group label, percentage between brackets (rounded-off)	192
K	Volume of private sector shipping according to group label of skippers in *last*, percentage between brackets (rounded-off)	194
L	Total number of crew on board all incoming and outgoing ships in the private sector and the VOC	196
M	Number of private sector ship movements according to port	197
N	Number of private sector ship movements according to geographical zone, percentage between brackets (rounded-off)	200
O	Volume of private sector traffic according to port, in *last*	201
P	Volume of private sector traffic according to geographical zone in *last*, percentage between brackets (rounded-off)	204
Q	Minimum and maximum months of private sector activity, in percent of the number of ship movements (rounded-off)	205
R	Total number of loads of merchandise in the private sector	206
S	Cargoes and loads on board private sector ships, percentage	

	between brackets (rounded-off)	207
T	Imports and exports of the most important private sector commodities (rounded-off)	208
U	Estimated prices of the most important private sector commodities in rixdollars (rounded-off)	227
V	Annual average number of private sector cargoes and loads carried on selected routes (rounded-off)	236
W	Annual average number of private sector cargoes and loads carried by selected groups of skippers on the most important routes (rounded-off)	238
X	Annual average private sector imports into and exports from Makassar of selected commodities on the most important routes (rounded-off)	240
Y	Annual average imports and exports of selected commodities on the Amoy route and its percentage in the total private trade in Makassar in 1774-1777 and 1786-1789 (rounded-off)	246
Z	Annual average imports and exports of selected commodities transported by the most important groups of private sector skippers, Amoy excluded (rounded-off)	247

Table A. Total number of private sector ship movements

	Incoming	%	Outgoing	%	Total
1717-1718	228	45.15	277	54.85	505
1722-1723	286	50.80	277	49.20	563
1723-1724	228	46.63	261	53.37	489
1724-1725	237	47.31	264	52.69	501
1725-1726	243	45.60	290	54.40	533
1733-1734	193	47.19	216	52.81	409
1766-1767	222	42.29	303	57.71	525
1767-1768	262	46.29	304	53.71	566
1768-1769	257	44.85	316	55.15	573
1774-1775	173	39.23	268	60.77	441
1775-1776	204	42.06	281	57.94	485
1776-1777	191	51.76	178	48.24	369
1786-1787	245	46.14	286	53.86	531
1787-1788	221	39.75	335	60.25	556
1788-1789	305	44.92	374	55.08	679
1796-1797	191	46.47	220	53.52	411
Total	3,686	45.30	4,450	54.70	8,136

Source: Harbourmasters' registers

Table B. Total number of VOC ship movements

	Incoming	Outgoing	Total
1717-18	6	8	14
1722-23	5	4	9
1723-24	4	4	8
1724-25	4	4	8
1725-26	8	5	13
1733-34	10	13	23
1766-67	3	10	13
1767-68	10	6	16
1768-69	8	9	17
1774-75	4	7	11
1775-76	1	2	3
1776-77	8	2	10
1786-87	4	3	7
1787-88	7	5	12
1788-89	8	6	14
1796-97	2	1	3
Total	92	89	181

Source: Correspondence VOC Makassar, Lists of VOC traffic in Batavia

Table C. Total volume of incoming and outgoing private sector traffic in *last*

	Incoming	%	Outgoing	%	Total
1717-1718	2,425	48.80	2,544	51.20	4,969
1722-1723	2,309	53.72	1,989	46.28	4,298
1723-1724	1,710	47.58	1,884	52.42	3,594
1724-1725	1,677	48.74	1,764	51.26	3,441
1725-1726	1,834	49.77	1,851	50.23	3,685
1733-1734	1,175	47.36	1,306	52.64	2,481
1766-1767	1,436	44.72	1,775	55.28	3,211
1767-1768	1,499	49.02	1,559	50.98	3,058
1768-1769	1,606	46.85	1,822	53.15	3,428
1774-1775	1,525	44.81	1,878	55.19	3,403
1775-1776	1,755	47.82	1,915	52.18	3,670
1776-1777	1,397	50.74	1,356	49.26	2,753
1786-1787	2,325	46.77	2,646	53.23	4,971
1787-1788	2,205	43.57	2,856	56.43	5,061
1788-1789	2,972	47.04	3,346	52.96	6,318
1796-1797	2,168	45.96	2,549	54.04	4,717
Total	30,018	47.60	33,040	52.40	63,058

Source: Harbourmasters' registers

Comment: In 3.65% of the individual ship movements in the harbourmasters' registers no numbers are entered for volume. If we exclude the year 1717-1718 this percent falls to only 1.42%. In this table such omissions have been filled in by taking a. the data on volume of another ship movement by the same skipper, provided the type of ship was the same, or b. the general average for that particular type of ship.

Table D. Total volume of incoming and outgoing VOC traffic in *last*

	Incoming	%	Outgoing	%	Total
1717-1718	620	47.08	697	52.92	1,317
1722-1723	729	50.70	709	49.30	1,438
1723-1724	536	52.91	477	47.09	1,013
1724-1725	396	50.06	395	49.94	791
1725-1726	687	52.89	612	47.11	1,299
1733-1734	1,907	48.51	2,024	51.49	3,931
1766-1767	1,042	43.67	1,344	56.33	2,386
1767-1768	1,112	57.65	817	42.35	1,929
1768-1769	943	45.18	1,144	54.82	2,087
1774-1775	1,000	31.08	2,217	68.92	3,217
1775-1776	575	48.73	605	51.27	1,180
1776-1777	2,345	68.07	1,100	31.93	3,445
1786-1787	353	54.14	299	45.86	652
1787-1788	816	54.88	671	45.12	1,487
1788-1789	1,199	66.10	615	33.90	1,814
1796-1797	270	69.23	120	30.77	390
Total	14,530	51.21	13,846	48.79	28,376

Source: Correspondence VOC Makassar, Lists of VOC traffic in Batavia, Bruijn et al. 1979a, 1979b.

Table E. Number of private sector ship movements per ship type, percentage between brackets (rounded-off)

	Chialoup		*Gonting*		*Paduwakang*	
1717-1718	98	(19)	190	(38)	1	(0)
1722-1723	77	(14)	133	(23)	4	(1)
1723-1724	62	(13)	97	(20)	2	(0)
1724-1725	57	(11)	114	(23)	0	
1725-1726	57	(11)	114	(21)	2	(0)
1733-1734	34	(8)	57	(14)	1	(0)
1766-1767	32	(6)	6	(1)	461	(88)
1767-1768	18	(3)	7	(1)	513	(91)
1768-1769	18	(3)	23	(4)	502	(88)
1774-1775	12	(3)	3	(1)	395	(89)
1775-1776	17	(4)	2	(0)	440	(91)
1776-1777	12	(3)	2	(1)	330	(89)
1786-1787	6	(1)	2	(0)	474	(89)
1787-1788	2	(0)	0		507	(91)
1788-1789	1	(0)	0		653	(96)
1796-1797	3	(1)	0		390	(95)

	Pankor		*Pencalang*		Other/Unknown	
1717-1718	179	(35)	29	(6)	8	(2)
1722-1723	303	(54)	32	(6)	14	(2)
1723-1724	274	(56)	22	(4)	32	(8)
1724-1725	302	(60)	20	(4)	8	(3)
1725-1726	341	(64)	15	(3)	4	(1)
1733-1734	303	(74)	11	(3)	3	(1)
1766-1767	0		24	(5)	2	(0)
1767-1768	0		24	(4)	4	(1)
1768-1769	0		17	(3)	13	(2)
1774-1775	0		19	(4)	12	(3)
1775-1776	0		19	(4)	7	(1)
1776-1777	0		19	(5)	6	(2)
1786-1787	31	(6)	8	(2)	10	(2)
1787-1788	19	(3)	5	(1)	23	(5)
1788-1789	0		10	(1)	14	(3)
1796-1797	0		6	(1)	12	(3)

Source: Harbourmasters' registers

Table F. Average number of crew and average volume in *last* of frequently occurring private sector ship types (rounded-off)

	Chialoup		*Gonting*		*Paduwakang*	
	crew	volume	crew	volume	crew	volume
1717-1718	17	33	13	7	–	–
1722-1723	19	33	17	7	–	–
1723-1724	21	32	17	7	–	–
1724-1725	20	32	19	7	–	–
1725-1726	22	35	18	7	–	–
1733-1734	24	32	19	12	–	–
1766-1767	25	30	–	–	13	4
1767-1768	24	33	–	–	12	4
1768-1769	21	28	12	10	11	4
1774-1775	22	29	–	–	12	5
1775-1776	20	28	–	–	12	5
1776-1777	23	32	–	–	12	5
1786-1787	–	–	–	–	14	7
1787-1788	–	–	–	–	13	7
1788-1789	–	–	–	–	13	7
1796-1797	–	–	–	–	14	9

	Pankor		*Pencalang*		All ships	
	crew	volume	crew	volume	crew	volume
1717-1718	8	?	12	4	12	?
1722-1723	8	2	13	5	13	8
1723-1724	8	2	16	4	12	7
1724-1725	9	2	12	5	13	7
1725-1726	8	2	10	4	12	7
1733-1734	10	2	17	5	13	6
1766-1767	–	–	21	15	14	6
1767-1768	–	–	20	17	12	5
1768-1769	–	–	18	13	12	6
1774-1775	–	–	21	20	13	8
1775-1776	–	–	20	18	13	8
1776-1777	–	–	21	18	13	7
1786-1787	13	8	–	–	15	9
1787-1788	14	11	–	–	14	9
1788-1789	–	–	–	–	14	9
1796-1797	–	–	–	–	15	10

Source: Harbourmasters' registers

Comment: The data for volume in this table are the original ones from the sources. Contrary to other tables containing data about ships' volumes blanks in the sources are not filled in by estimates. In 1717-1718 the average volume for all ships was 14 *last*. This number is not entered in this table, because it does not include one single vessel of the most numerous group of registered ships, namely the *pankor*.

Table G. Volume of traffic according to private sector ship type in *last*, percentage between brackets (rounded-off)

	Brigantijn/Bark		*Chialoup*		*Gonting*	
1717-1718	0		3,244	(66)	1196	(24)
1722-1723	0		2,521	(59)	864	(20)
1723-1724	0		1,995	(55)	639	(18)
1724-1725	0		1,821	(53)	781	(23)
1725-1726	0		1,984	(54)	771	(21)
1733-1734	0		1,102	(44)	682	(28)
1766-1767	0		948	(30)	55	(2)
1767-1768	0		585	(19)	54	(2)
1768-1769	160	(5)	500	(15)	220	(6)
1774-1775	455	(14)	344	(10)	30	(1)
1775-1776	260	(7)	468	(13)	14	(0)
1776-1777	80	(3)	386	(14)	14	(1)
1786-1787	0		157	(3)	60	(1)
1787-1788	177	(3)	95	(2)	0	
1788-1789	380	(6)	28	(0)	0	
1796-1797	80	(2)	87	(2)	0	

	Jonk		*Paduwakang*		*Pankor*	
1717-1718		0	4	(0)	358	(7)
1722-1723		0	11	(0)	659	(15)
1723-1724		0	8	(0)	597	(17)
1724-1725		0	0		718	(21)
1725-1726		0	14	(0)	837	(23)
1733-1734		0	6	(0)	615	(25)
1766-1767		0	1,829	(57)	0	
1767-1768		0	1,979	(65)	0	
1768-1769	332	(10)	1,972	(57)	0	
1774-1775	340	(10)	1,848	(54)	0	
1775-1776	340	(9)	2,233	(61)	0	
1776-1777	340	(12)	1,581	(58)	0	
1786-1787	800	(16)	3,525	(71)	251	(5)
1787-1788	800	(16)	3,656	(72)	201	(4)
1788-1789	800	(13)	4,771	(76)	0	
1796-1797	800	(17)	3,534	(75)	0	

	Pencalang		Other/unknown	
1717-1718	108	(2)	59	(1)
1722-1723	157	(4)	86	(2)
1723-1724	94	(3)	261	(7)
1724-1725	92	(2)	29	(1)
1725-1726	65	(2)	14	(0)
1733-1734	58	(2)	18	(1)
1766-1767	368	(11)	11	(0)
1767-1768	407	(13)	33	(1)
1768-1769	215	(6)	29	(1)
1774-1775	384	(11)	2	(0)
1775-1776	347	(10)	8	(0)
1776-1777	342	(12)	10	(0)
1786-1787	120	(3)	58	(1)
1787-1788	55	(1)	77	(2)
1788-1789	190	(3)	149	(2)
1796-1797	134	(3)	82	(2)

Source: Harbourmasters' registers
Comment: See Table F.

Table H. Most common armament according to private sector ship type 1766-1769

	number of vessels	total weapons	average per vessel
Chialoup			
cannon/'pieces'	34	185	5.44
swivel guns	9	52	5.78
rentaka	4	30	7.50
blunderbusses	21	62	2.95
snaphaunces	34	262	7.71
powder (in pounds)	33	2,757	83.55
Gonting			
cannon/'pieces'	5	26	5.20
swivel guns	3	14	4.67
rentaka	5	25	5.00
blunderbusses	12	41	3.42
snaphaunces	19	132	6.95
powder (in pounds)	9	475	52.78
Paduwakang			
cannon/'pieces'	22	48	2.18
swivel guns	15	59	3.93
rentaka	353	923	2.61
blunderbusses	454	1,050	2.31
snaphaunces	641	2,201	3.43
powder (in pounds)	61	1,702	27.90
Pencalang			
cannon/'pieces'	22	94	4.27
swivel guns	10	47	4.70
rentaka	9	38	4.22
blunderbusses	16	70	4.38
snaphaunces	30	238	7.93
powder (in pounds)	32	2,059	64.34

Source: Harbourmasters' registers
Comment: In this table cannon and 'small pieces' are taken together on the assumption that these labels were interchangeable.

Table I. Most common armament of *paduwakang* 1766-1769, 1774-1777, 1786-1789

	number vessels	percent vessels	total weapons	average per vessel
1766-1769 (total 781 vessels)				
cannon	1	0.1	2	2.00
'small pieces'	21	2.7	46	2.19
swivel guns	15	1.9	59	3.93
rentaka	353	45.2	923	2.61
blunderbusses	454	58.1	1,050	2.31
snaphaunces	641	82.1	2,201	3.43
powder (in pounds)	61	7.8	1,702	27.90
1774-1777 (total 663 vessels)				
cannon	6	0.9	26	4.33
'small pieces'	53	8.0	132	2.49
swivel guns	10	1.5	40	4.00
rentaka	345	52.0	988	2.86
blunderbusses	434	65.5	1,185	2.73
snaphaunces	546	82.4	2,271	4.16
powder (in pounds)	85	12.8	3,188	37.51
1786-1789 (total 1,594 vessels)				
cannon	170	10.7	608	3.58
'small pieces'	362	22.7	1,770	4.89
swivel guns	165	10.4	536	3.25
rentaka	836	52.4	2,489	2.98
blunderbusses	1,203	75.5	3,740	3.11
snaphaunces	1,448	90.8	7,057	4.87
powder (in pounds)	793	49.7	29,057	36.64

Source: Harbourmasters' registers

Comment: In the years 1766-1769 and 1774-1777 only outgoing vessels showed registration of armament, in the years 1786-1789 both outgoing and incoming were registered. 'Pieces' are counted under the heading cannon and not under 'small pieces'. In the case of powder in the years 1786-1789 only those are included showing measures of pounds, *kati* (1.25 pounds) and barrels (50 pounds), the meaning of *tonnen, bottels* and *flessen* still not being clear.

Table J. Number of ship movements by private sector skippers according to group label, percentage between brackets (rounded-off)

	Buginese		Burgher		Chinese		Chinese Peranakan		Company's Subject	
1717-1718	10	(2)	69	(14)	45	(9)	17	(4)	0	
1722-1723	75	(13)	62	(11)	32	(6)	7	(1)	0	
1723-1724	44	(9)	58	(12)	25	(5)	5	(1)	0	
1724-1725	36	(7)	42	(8)	31	(6)	3	(1)	0	
1725-1726	47	(9)	40	(8)	32	(6)	6	(1)	1	(0)
1733-1734	0		28	(7)	39	(9)	9	(2)	90	(22)
1766-1767	31	(6)	23	(4)	98	(19)	46	(9)	222	(42)
1767-1768	33	(6)	20	(4)	82	(14)	54	(10)	269	(47)
1768-1769	0		21	(4)	112	(20)	57	(10)	205	(36)
1774-1775	39	(9)	31	(7)	102	(23)	28	(6)	88	(20)
1775-1776	32	(7)	37	(8)	132	(27)	24	(5)	101	(21)
1776-1777	39	(11)	35	(9)	105	(28)	24	(7)	90	(24)
1786-1787	0		24	(5)	158	(30)	47	(9)	138	(26)
1787-1788	24	(4)	14	(3)	167	(30)	51	(9)	105	(19)
1788-1789	34	(5)	14	(2)	218	(32)	76	(11)	96	(14)
1796-1797	11	(3)	28	(7)	139	(34)	62	(15)	0	

	Galesonger		Makassarese		Malay		Mandarese		Marosser	
1717-1718	12	(3)	90	(18)	69	(14)	1	(0)	0	
1722-1723	5	(1)	156	(28)	37	(7)	1	(0)	0	
1723-1724	0		107	(22)	20	(4)	0		0	
1724-1725	2	(0)	17	(3)	28	(6)	0		4	(1)
1725-1726	17	(3)	15	(3)	11	(2)	1	(0)	24	(5)
1733-1734	8	(2)	0		43	(10)	0		0	
1766-1767	35	(7)	6	(1)	44	(8)	1	(0)	0	
1767-1768	39	(7)	2	(0)	55	(10)	0		0	
1768-1769	53	(9)	0		66	(11)	1	(0)	0	
1774-1775	82	(19)	1	(0)	51	(12)	0		0	
1775-1776	60	(12)	2	(0)	66	(14)	0		0	
1776-1777	2	(1)	1	(0)	40	(11)	0		0	
1786-1787	32	(6)	1	(0)	74	(14)	1	(0)	0	
1787-1788	59	(11)	1	(0)	102	(18)	0		0	
1788-1789	35	(5)	0		166	(25)	0		0	
1796-1797	8	(2)	0		54	(13)	0		0	

	Moor Peranakan		Wajorese		Other		Unknown	
1717-1718	17	(4)	11	(3)	2	(1)	142	(28)
1722-1723	9	(2)	76	(13)	11	(2)	92	(16)
1723-1724	4	(1)	44	(9)	8	(2)	174	(35)
1724-1725	3	(1)	63	(12)	3	(1)	269	(54)
1725-1726	1	(0)	93	(17)	6	(1)	239	(45)
1733-1734	4	(1)	64	(16)	11	(3)	113	(28)
1766-1767	5	(1)	0		9	(2)	5	(1)
1767-1768	1	(0)	2	(0)	5	(1)	4	(1)
1768-1769	2	(0)	0		4	(1)	50	(9)
1774-1775	4	(1)	2	(0)	11	(3)	0	
1775-1776	9	(2)	8	(2)	10	(2)	2	(0)
1776-1777	12	(3)	7	(2)	13	(4)	1	(0)
1786-1787	2	(0)	6	(1)	0		45	(9)
1787-1788	7	(1)	6	(1)	2	(1)	18	(3)
1788-1789	9	(1)	12	(2)	4	(1)	13	(2)
1796-1797	2	(0)	3	(1)	3	(1)	101	(24)

Source: Harbourmasters' registers

Table K. Volume of private sector shipping according to group label of skippers in *last*, percentage between brackets (rounded-off)

	Buginese		Burgher		Chinese		Chinese Peranakan		Company's Subject	
1717-1718	42	(1)	1,876	(38)	1,087	(22)	124	(2)	0	
1722-1723	193	(5)	1,603	(37)	955	(22)	56	(1)	0	
1723-1724	135	(4)	1,508	(42)	654	(18)	22	(1)	0	
1724-1725	110	(3)	1,087	(32)	765	(22)	33	(1)	0	
1725-1726	136	(4)	1,033	(28)	1,013	(28)	99	(3)	2	(0)
1733-1734	0		546	(22)	844	(34)	64	(3)	180	(7)
1766-1767	128	(4)	373	(12)	1,028	(32)	369	(11)	775	(24)
1767-1768	128	(4)	447	(15)	692	(23)	393	(13)	904	(30)
1768-1769	0		376	(11)	1,182	(35)	257	(7)	710	(21)
1774-1775	197	(6)	596	(17)	1,310	(38)	152	(4)	361	(11)
1775-1776	204	(6)	671	(18)	1,364	(37)	131	(4)	439	(12)
1776-1777	189	(7)	542	(20)	1,132	(41)	127	(5)	354	(13)
1786-1787	0		218	(4)	2,163	(44)	342	(7)	852	(17)
1787-1788	153	(3)	131	(3)	2,333	(46)	342	(7)	698	(14)
1788-1789	238	(4)	142	(2)	3,045	(48)	614	(10)	497	(8)
1796-1797	102	(2)	430	(9)	2,185	(46)	592	(13)	0	

	Galesonger		Makassarese		Malay		Mandarese		Marosser	
1717-1718	28	(0)	327	(7)	345	(7)	8	(0)	0	
1722-1723	10	(0)	407	(10)	191	(4)	2	(0)	0	
1723-1724	0		277	(8)	74	(2)	0		0	
1724-1725	6	(0)	39	(1)	103	(3)	0		10	(0)
1725-1726	48	(1)	36	(1)	43	(1)	4	(0)	72	(2)
1733-1734	16	(1)	0		106	(4)	0		0	
1766-1767	94	(3)	18	(1)	306	(9)	2	(0)	0	
1767-1768	115	(4)	7	(0)	290	(9)	0		0	
1768-1769	165	(5)	0		479	(14)	6	(0)	0	
1774-1775	326	(10)	3	(0)	281	(8)	0		0	
1775-1776	257	(7)	7	(0)	438	(12)	3	(0)	0	
1776-1777	8	(0)	5	(0)	241	(9)	0		0	
1786-1787	252	(5)	8	(0)	639	(13)	5	(0)	0	
1787-1788	388	(8)	10	(0)	663	(13)	0		0	
1788-1789	197	(3)	0		1,167	(18)	0		0	
1796-1797	73	(2)	0		455	(10)	0		0	

	Moor Peranakan		Wajorese		Other		Unknown	
1717-1718	57	(1)	34	(1)	8	(0)	1,033	(21)
1722-1723	34	(1)	292	(7)	180	(4)	375	(9)
1723-1724	12	(0)	244	(7)	96	(3)	572	(16)
1724-1725	11	(1)	277	(8)	100	(3)	900	(26)
1725-1726	2	(0)	446	(12)	89	(2)	662	(18)
1733-1734	8	(0)	208	(8)	258	(11)	251	(10)
1766-1767	36	(1)	0		30	(1)	52	(2)
1767-1768	5	(0)	10	(0)	40	(1)	27	(1)
1768-1769	12	(0)	0		44	(1)	197	(6)
1774-1775	21	(1)	11	(0)	125	(4)	20	(1)
1775-1776	37	(1)	41	(1)	68	(2)	10	(0)
1776-1777	56	(2)	29	(1)	66	(2)	4	(0)
1786-1787	20	(1)	42	(1)	63	(1)	367	(7)
1787-1788	52	(1)	50	(1)	11	(0)	230	(4)
1788-1789	69	(1)	95	(2)	38	(1)	216	(3)
1796-1797	17	(0)	33	(1)	31	(1)	799	(17)

Source: Harbourmasters' registers

Table L. Total number of crew on board all incoming and outgoing ships in the private sector and the VOC

	Private sector		VOC	
	ship movements	crew	ship movements	crew
1717-1718	505	6,174	14	322
1722-1723	563	7,322	9	381
1723-1724	489	5,881	8	248
1724-1725	501	6,279	8	186
1725-1726	533	6,327	13	392
1733-1734	409	5,144	23	856
1766-1767	525	7,279	13	550
1767-1768	566	7,063	16	463
1768-1769	573	6,614	17	503
1774-1775	441	5,907	11	712
1775-1776	485	6,468	3	231
1776-1777	369	4,934	10	724
1786-1787	531	8,012	7	165
1787-1788	556	7,685	12	367
1788-1789	679	9,347	14	394
1796-1797	411	6,154	3	116

Source: Harbourmasters' registers, Correspondence VOC Makassar, Lists of VOC traffic in Batavia

Comment: In the private sector the number of crew for all ship movements was not given, the annual average degree of under-registration being 1.1%. The total number for the crew in this table has been arrived at by taking the actual numbers from the harbourmasters' registers, to which a certain factor is added for those ship movements for which no number is given. The factor added is the average number of crew per vessel as given in Table F multiplied by the number of ship movements without crew-numbers. In the case of the missing number of the incoming Amoy junk in 1797, the crew-number of that vessel on departure has been filled in. VOC crew-numbers were absent from the sources in a number of years, in particular in the 1760s and 1770s. Then for Europe-built vessels the number of the crew was usually taken from the homeward-bound voyages of these vessels as found in Bruijn et al. 1979b. In the few remaining cases estimates were made on the basis of comparison with ships of about the same size, for which such information was available. In case for Asia-built VOC vessels no crew-number was available, estimates were made on the basis of information found in Knaap 1996:36, as well as by way of comparison with other ships in the sample, for which crew-numbers were given.

Table M. Number of private sector ship movements according to port

	Ambon	Banda	Banjarmasin	Batavia	Bima
1717-1718	48	31	30	34	39
1722-1723	31	34	30	81	91
1723-1724	26	18	23	52	146
1724-1725	21	17	16	53	67
1725-1726	30	10	23	59	81
1733-1734	11	14	8	47	30
1766-1767	11	1	0	54	14
1767-1768	12	0	4	53	18
1768-1769	7	0	1	50	20
1774-1775	12	2	4	44	43
1775-1776	10	2	2	54	44
1776-1777	5	0	2	38	12
1786-1787	4	4	0	62	10
1787-1788	8	0	0	49	13
1788-1789	4	6	2	45	24
1796-1797	0	1	0	36	30

	Bonerate	Bugis/ Cenrana	Buton	Ende	Gresik
1717-1718	0	4	19	4	0
1722-1723	0	1	11	1	0
1723-1724	0	1	11	3	0
1724-1725	0	4	9	8	0
1725-1726	0	5	11	9	0
1733-1734	0	7	77	4	0
1766-1767	120	20	44	12	9
1767-1768	165	35	31	14	8
1768-1769	133	34	44	15	3
1774-1775	28	28	41	15	4
1775-1776	23	29	51	16	2
1776-1777	31	41	50	16	2
1786-1787	24	51	74	8	2
1787-1788	42	47	49	16	2
1788-1789	50	42	76	16	9
1796-1797	47	28	9	12	5

	Kaili	Komodo	Manggarai	Pasir	Pulau Laut
1717-1718	15	0	3	28	9
1722-1723	8	0	6	24	9
1723-1724	12	0	3	10	3
1724-1725	32	0	5	18	7
1725-1726	19	0	2	35	2
1733-1734	14	0	15	2	8
1766-1767	0	7	0	0	0
1767-1768	0	5	0	0	0
1768-1769	3	15	0	0	0
1774-1775	12	4	0	0	0
1775-1776	10	1	0	0	0
1776-1777	5	4	0	0	0
1786-1787	1	0	0	0	0
1787-1788	2	0	0	0	0
1788-1789	2	0	0	0	0
1796-1797	0	0	0	2	0

	Sanggar	Selayar	Semarang	Solor	Sumba
1717-1718	0	10	127	12	3
1722-1723	11	13	110	5	5
1723-1724	7	9	65	2	6
1724-1725	0	17	96	3	9
1725-1726	0	13	113	0	8
1733-1734	0	9	74	2	1
1766-1767	13	14	22	0	0
1767-1768	14	3	11	0	0
1768-1769	7	4	21	0	0
1774-1775	3	8	15	0	0
1775-1776	1	5	35	0	0
1776-1777	1	9	28	0	0
1786-1787	0	3	44	0	0
1787-1788	0	8	33	0	0
1788-1789	0	5	52	0	0
1796-1797	0	7	31	0	0

	Sumbawa	Surabaya	Tambora	Ternate	Other
1717-1718	39	0	28	1	12
1722-1723	59	0	10	1	22
1723-1724	63	0	12	0	17
1724-1725	77	0	13	1	28
1725-1726	53	0	13	3	44
1733-1734	74	0	1	2	9
1766-1767	178	1	1	0	4
1767-1768	176	5	1	0	11
1768-1769	201	6	5	0	4
1774-1775	165	0	8	0	5
1775-1776	188	6	2	0	4
1776-1777	111	10	1	0	3
1786-1787	225	6	0	6	7
1787-1788	270	2	1	12	2
1788-1789	318	11	0	10	7
1796-1797	182	8	0	6	7

Source: Harbourmasters' registers

Table N. Number of private sector ship movements according to geographical zone, percentage between brackets (rounded-off)

	China		Java		Kalimantan		Malayan Waters	
1717-1718	0		170	(34)	72	(14)	16	(3)
1722-1723	0		191	(34)	65	(11)	16	(3)
1723-1724	0		117	(24)	42	(9)	10	(2)
1724-1725	0		149	(30)	44	(9)	17	(3)
1725-1726	0		174	(33)	68	(13)	11	(2)
1733-1734	0		121	(29)	18	(4)	3	(1)
1766-1767	0		89	(17)	1	(0)	0	
1767-1768	0		80	(14)	4	(1)	0	
1768-1769	2	(0)	80	(14)	1	(0)	0	
1774-1775	2	(0)	65	(15)	4	(1)	0	
1775-1776	2	(0)	98	(20)	2	(1)	0	
1776-1777	2	(1)	79	(21)	2	(1)	0	
1786-1787	2	(0)	117	(22)	0		0	
1787-1788	2	(0)	86	(15)	0		0	
1788-1789	2	(0)	119	(18)	2	(0)	0	
1796-1797	2	(0)	80	(20)	2	(0)	0	

	Maluku		Nusa Tenggara		Sulawesi		Unknown	
1717-1718	80	(16)	118	(23)	49	(10)	0	
1722-1723	66	(12)	189	(34)	35	(6)	1	(0)
1723-1724	44	(9)	240	(49)	36	(7)	0	
1724-1725	39	(8)	179	(36)	73	(14)	0	
1725-1726	43	(8)	167	(31)	69	(13)	1	(0)
1733-1734	27	(7)	126	(31)	114	(28)	0	
1766-1767	12	(2)	225	(43)	198	(38)	0	
1767-1768	12	(2)	228	(40)	242	(43)	0	
1768-1769	7	(1)	263	(46)	220	(39)	0	
1774-1775	14	(3)	238	(54)	117	(27)	1	(0)
1775-1776	12	(3)	252	(52)	118	(24)	1	(0)
1776-1777	5	(1)	145	(39)	136	(37)	0	
1786-1787	14	(3)	243	(46)	155	(29)	0	
1787-1788	20	(4)	300	(54)	148	(27)	0	
1788-1789	20	(3)	359	(53)	175	(26)	2	(0)
1796-1797	7	(2)	229	(56)	91	(22)	0	

Source: Harbourmasters' registers
Comment: Malayan Waters, that is the area of the Melaka Straits, Sumatra, Malaya and surroundings.

Table O. Volume of private sector traffic according to port, in *last*

	Ambon	Banda	Banjarmasin	Batavia	Bima
1717-1718	1,554	1,080	219	502	95
1722-1723	1,045	1,011	101	795	257
1723-1724	875	530	125	583	444
1724-1725	750	502	69	556	145
1725-1726	1,144	266	86	793	170
1733-1734	390	475	31	667	70
1766-1767	280	30	0	928	45
1767-1768	294	0	38	697	56
1768-1769	165	0	5	640	68
1774-1775	307	18	54	853	181
1775-1776	285	18	14	840	198
1776-1777	75	0	14	757	48
1786-1787	46	58	0	615	46
1787-1788	74	0	0	605	64
1788-1789	56	59	109	431	185
1796-1797	0	20	0	430	236

	Bonerate	Bugis/ Cenrana	Buton	Ende	Gresik
1717-1718	0	8	44	11	0
1722-1723	0	2	25	3	0
1723-1724	0	2	27	7	0
1724-1725	0	10	27	29	0
1725-1726	0	12	35	25	0
1733-1734	0	30	154	17	0
1766-1767	419	63	214	44	55
1767-1768	527	121	155	58	127
1768-1769	346	114	166	93	72
1774-1775	113	100	177	67	70
1775-1776	99	132	233	76	12
1776-1777	119	158	220	70	27
1786-1787	127	277	507	75	18
1787-1788	209	280	277	142	17
1788-1789	246	250	507	132	101
1796-1797	366	220	86	108	82

	Kaili	Komodo	Manggarai	Pasir	Pulau Laut
1717-1718	65	0	9	84	37
1722-1723	23	0	13	59	25
1723-1724	37	0	9	23	9
1724-1725	242	0	12	39	20
1725-1726	65	0	6	89	4
1733-1734	37	0	30	4	17
1766-1767	0	28	0	0	0
1767-1768	0	10	0	0	0
1768-1769	16	26	0	0	0
1774-1775	60	30	0	0	0
1775-1776	52	4	0	0	0
1776-1777	37	14	0	0	0
1786-1787	6	0	0	0	0
1787-1788	4	0	0	0	0
1788-1789	4	0	0	0	0
1796-1797	0	0	0	10	0

	Sanggar	Selayar	Semarang	Solor	Sumba
1717-1718	0	23	905	38	24
1722-1723	22	26	543	19	14
1723-1724	14	18	615	7	31
1724-1725	0	43	577	11	34
1725-1726	0	27	484	0	29
1733-1734	0	18	256	6	3
1766-1767	37	38	228	0	0
1767-1768	47	8	114	0	0
1768-1769	24	13	268	0	0
1774-1775	11	18	129	0	0
1775-1776	3	17	315	0	0
1776-1777	3	32	189	0	0
1786-1787	0	11	428	0	0
1787-1788	0	30	271	0	0
1788-1789	0	20	485	0	0
1796-1797	0	38	300	0	0

	Sumbawa	Surabaya	Tambora	Ternate	Other
1717-1718	96	0	67	25	83
1722-1723	154	0	20	30	111
1723-1724	135	0	27	0	76
1724-1725	159	0	29	25	162
1725-1726	123	0	32	85	210
1733-1734	152	0	2	33	89
1766-1767	698	50	2	0	52
1767-1768	683	25	6	0	92
1768-1769	878	172	16	0	346
1774-1775	744	0	37	0	434
1775-1776	897	92	9	0	374
1776-1777	523	113	5	0	349
1786-1787	1,737	120	0	38	862
1787-1788	2,089	40	6	153	800
1788-1789	2,319	229	0	157	1,028
1796-1797	1,742	134	0	95	850

Source: Harbourmasters' registers

Table P. Volume of private sector traffic according to geographical zone in *last*, percentage between brackets (rounded-off)

	China		Java		Kalimantan		Malayan Waters	
1717-1718	0		1,407	(28)	359	(7)	72	(1)
1722-1723	0		1,338	(31)	189	(4)	101	(2)
1723-1724	0		1,198	(33)	172	(5)	47	(1)
1724-1725	0		1,133	(33)	137	(4)	100	(3)
1725-1726	0		1,287	(35)	202	(5)	58	(2)
1733-1734	0		923	(37)	52	(2)	12	(1)
1766-1767	0		1,301	(40)	12	(0)	0	
1767-1768	0		1,028	(34)	38	(1)	0	
1768-1769	332	(10)	1,152	(34)	5	(0)	0	
1774-1775	340	(10)	1,117	(33)	54	(2)	0	
1775-1776	340	(9)	1,268	(35)	14	(0)	0	
1776-1777	340	(12)	1,095	(40)	14	(0)	0	
1786-1787	800	(16)	1,202	(24)	0		0	
1787-1788	800	(16)	933	(18)	0		0	
1788-1789	800	(13)	1,356	(21)	109	(2)	0	
1796-1797	800	(17)	946	(20)	10	(0)	0	

	Maluku		Nusa Tenggara		Sulawesi		Unknown	
1717-1718	2,659	(54)	329	(7)	143	(3)	0	
1722-1723	2,086	(49)	495	(12)	84	(2)	5	(0)
1723-1724	1,405	(39)	667	(19)	105	(3)	0	
1724-1725	1,277	(37)	408	(12)	286	(11)	0	
1725-1726	1,495	(41)	387	(10)	254	(7)	2	(0)
1733-1734	898	(36)	276	(11)	320	(13)	0	
1766-1767	310	(10)	854	(27)	734	(23)	0	
1767-1768	294	(10)	860	(28)	838	(27)	0	
1768-1769	165	(5)	1,105	(32)	669	(19)	0	
1774-1775	325	(9)	1,070	(31)	468	(14)	29	(1)
1775-1776	303	(8)	1,187	(32)	533	(15)	25	(1)
1776-1777	75	(3)	663	(24)	566	(21)	0	
1786-1787	142	(3)	1,858	(37)	969	(20)	0	
1787-1788	227	(5)	2,301	(45)	800	(16)	0	
1788-1789	272	(4)	2,645	(42)	1,027	(16)	109	(2)
1796-1797	115	(2)	2,136	(45)	710	(15)	0	

Source: Harbourmasters' registers
Comment: See Table N.

Table Q. Minimum and maximum months of private sector activity, in percent of the number of ship movements (rounded-off)

	Total			
	Minimum		Maximum	
1717-1718	Feb.	2.0	Oct.	16.6
1722-1723	Feb.	3.0	Oct.	18.8
1723-1724	Feb.	1.4	Oct.	18.8
1724-1725	Feb.	2.4	Nov.	15.0
1725-1726	Feb.	3.0	Oct.	18.1
1733-1734	Apr.	4.4	Jun.	14.2
1766-1767	Feb.	3.0	Dec.	14.1
1767-1768	Mar.	2.3	May	16.1
1768-1769	Apr.	4.2	May	16.1
1774-1775	Dec.	3.6	Oct.	18.6
1775-1776	Jan.	2.1	Oct.	14.4
1776-1777	Aug.	1.6	Oct.	15.2
1786-1787	Feb.	3.2	Oct.	14.9
1787-1788	Jan.	2.0	Mar.	14.0
1788-1789	Jan.	2.0	Jun.	14.7
1796-1797	Jan.	3.2	Jun.	15.4

	Incoming				Outgoing			
	Minimum		Maximum		Minimum		Maximum	
1717-1718	Feb.	0.9	Dec.	20.6	Jan.	2.5	Oct.	18.8
1722-1723	Apr.	1.8	Oct.	16.1	Jan.	2.2	Oct.	21.7
1723-1724	Feb.	0.9	Nov.	21.0	Feb.	1.9	Oct.	19.5
1724-1725	July	4.2	Nov.	16.0	Feb.	0.4	Oct.	15.1
1725-1726	Feb.	3.3	Oct.	15.2	Mar.	0.0	Oct.	20.3
1733-1734	Feb.	1.0	May	15.5	Apr.	1.8	June	15.7
1766-1767	Jan.	2.2	May	30.2	May	1.0	Dec.	19.1
1767-1768	Feb.	0.8	May	29.0	Jan.	1.3	Nov.	18.4
1768-1769	July	1.6	May	31.5	May	3.5	Dec.	16.4
1774-1775	Feb.	1.7	May	29.5	May	0.4	Oct.	17.9
1775-1776	Feb.	2.0	May	19.1	Jan.	1.4	Oct.	17.1
1776-1777	July	1.6	May	25.1	May	0.6	Mar.	22.5
1786-1787	Feb.	1.2	May	20.4	May	3.5	Oct.	16.4
1787-1788	Jan.	0.9	May	24.0	Jan.	2.7	Mar.	20.6
1788-1789	Feb.	0.7	June	23.9	Jan.	2.1	Aug.	15.2
1796-1797	Jan.	1.6	June	18.4	Dec.	2.3	July	16.8

Source: Harbourmasters' registers

Table R. Total number of loads of merchandise in the private sector

	Incoming	%	Outgoing	%	Total
1717-1718	508	48.52	539	51.48	1,047
1722-1723	529	55.57	423	44.43	952
1723-1724	433	56.97	327	43.03	760
1724-1725	354	52.60	319	47.40	673
1725-1726	492	56.88	373	43.12	865
1733-1734	315	54.12	267	45.88	582
1766-1767	351	51.24	334	48.76	685
1767-1768	392	49.87	394	50.13	786
1768-1769	503	48.09	543	51.91	1,046
1774-1775	315	39.08	491	60.92	806
1775-1776	393	41.72	549	58.28	942
1776-1777	369	46.13	431	53.87	800
1786-1787	693	42.00	957	58.00	1,650
1787-1788	508	35.52	922	64.48	1,430
1788-1789	621	40.19	924	59.81	1,545
1796-1797	437	47.50	483	52.50	920
Total	7,213	46.57	8,276	53.43	15,489

Source: Harbourmasters' registers

Comment: A load is considered to be a shipment of one particular product, or sort of product, in the cargo. Consequently, one cargo could consist of one or more loads. Entries such as cargo *niets*, meaning 'nothing', cargo *onbekend*, 'unknown', as well as *mondkost*, 'supplies' or 'victuals', were not considered to constitute a load of merchandise, because they were not deemed as being for trading purposes.

Table S. Cargoes and loads on board private sector ships, percentage between brackets (rounded-off)

	Total cargoes	No merchandise		With merchandise		Total loads	Average loads per movement
1717-1718	505	91	(18)	414	(82)	1,047	2.53
1722-1723	563	196	(35)	367	(65)	952	2.59
1723-1724	489	241	(49)	248	(51)	760	3.06
1724-1725	501	238	(48)	263	(52)	673	2.56
1725-1726	533	228	(43)	305	(57)	865	2.84
1733-1734	409	103	(25)	306	(75)	582	1.90
1766-1767	525	240	(46)	285	(54)	685	2.40
1767-1768	566	144	(25)	422	(75)	786	1.86
1768-1769	573	103	(18)	470	(82)	1,046	2.23
1774-1775	441	43	(10)	398	(90)	806	2.03
1775-1776	485	31	(6)	454	(94)	942	2.07
1776-1777	369	36	(10)	333	(90)	800	2.40
1786-1787	531	29	(5)	502	(95)	1,650	3.29
1787-1788	556	41	(7)	515	(93)	1,430	2.78
1788-1789	679	63	(9)	616	(91)	1,545	2.51
1796-1797	411	16	(4)	395	(96)	920	2.33
Total	8,136	1,843	(23)	6,293	(77)	15,491	2.46

Source: Harbourmasters' registers

Comment: A load is considered to be a shipment of one particular product, or sort of product, within a cargo. Besides *niets*, that is, 'nothing', the no-merchandise-column includes the label cargo 'unknown' as well as *mondkost*, that is, 'supplies' or 'victuals', because these were not carried for trading purposes. Entries with no specific mentioning of quantity, such as 'some sugar' or 'some coconut' were counted as merchandise. Although not quantified, these items were obviously for trade. The same consideration has been applied to *enige contanten*, 'some ready money', or *enige kleinigheden*, 'some small things'. Any different commodity on board was considered to constitute one load. For example, if a ship carried certain numbers of sugar, cloth and slaves, it had three loads. The average number of loads per ship movement accounts only for ships with merchandise.

Table T. Imports and exports of the most important private sector commodities (rounded-off)

1717-1718

		Import	Export
Money			
Picis	1000 p.	–	–
Rixdollars	pieces	–	–
Human consumption articles			
Agar-agar	*pikul*	–	–
Arrack	can	17,265	700
Birds' nests	*pikul*	1	–
Coconut	pieces	13,500	30,000
Gambier	*pikul*	–	–
Oil, coconut	can	720	–
Opium	*pikul*	–	–
Paddy	*pikul*	533	1,333
Rice	*pikul*	4,398	36,505
Salt	*pikul*	4,515	1,855
Sugar, candy	*pikul*	44	3
Sugar, fine-grain	*pikul*	96	4
Sugar, palm	balls	–	35,500
Tea	*pikul*	7	–
Tobacco, Chinese	*pikul*	156	–
Tobacco, Javanese	*pikul*	3,013	9
Trepang	*pikul*	7	182
Manufactured goods			
Bowls	pieces	870	1,600
Bowls and plates	pieces	–	–
Bush-knives	pieces	20,509	6,800
Chests, Butonese	pieces	690	660
Cloth, Buginese	pieces	–	2,200
Cloth, Chinese	pieces	–	–
Cloth, Indian	pieces	9,760	1,850
Cloth, Indonesian, Sulawesi excl.	pieces	300	60
Cloth, Selayar's	pieces	120	710
Cloth, Sulawesian, other	pieces	–	50
Knives	pieces	1,680	–
Linen, Chinese	pieces	–	–
Pans	pieces	156	6
Plates	pieces	200	–
Silk, woven	rolls	20	–
Other products			
Cotton	*pikul*	180	8

Gold thread	chests	6	–
Iron	*pikul*	14	3
Karet	*pikul*	10	15
Rattan	bundles	9,590	170
Silk, raw	*pikul*	1	–
Slaves	persons	195	140
Wax	*pikul*	78	154

1722-1723

		Import	Export
Money			
Picis	1000 p.	–	–
Rixdollars	pieces	–	–
Human consumption articles			
Agar-agar	*pikul*	–	6
Arrack	can	7,590	–
Birds' nests	*pikul*	–	–
Coconut	pieces	5,000	36,100
Gambier	*pikul*	–	–
Oil, coconut	can	1,284	–
Opium	*pikul*	–	–
Paddy	*pikul*	2,667	1,750
Rice	*pikul*	588	27,624
Salt	*pikul*	1,164	1,260
Sugar, candy	*pikul*	6	–
Sugar, fine-grain	*pikul*	49	–
Sugar, palm	balls	2,000	17,500
Tea	*pikul*	42	–
Tobacco, Chinese	*pikul*	836	–
Tobacco, Javanese	*pikul*	2,910	–
Trepang	*pikul*	25	547
Manufactured goods			
Bowls	pieces	17,460	200
Bowls and plates	pieces	–	–
Bush-knives	pieces	–	100
Chests, Butonese	pieces	276	280
Cloth, Buginese	pieces	–	2,850
Cloth, Chinese	pieces	–	–
Cloth, Indian	pieces	9,390	520
Cloth, Indonesian, Sulawesi excl.	pieces	310	–
Cloth, Selayar's	pieces	220	1,020
Cloth, Sulawesian, other	pieces	–	30
Knives	pieces	1,080	–
Linen, Chinese	pieces	–	–

Pans	pieces	2,190	–
Plates	pieces	23,400	–
Silk, woven	rolls	–	–
Other products			
Cotton	*pikul*	36	15
Gold thread	chests	43	–
Iron	*pikul*	82	5
Karet	*pikul*	4	10
Rattan	bundles	3,097	50
Silk, raw	*pikul*	1	–
Slaves	persons	198	141
Wax	*pikul*	122	179

1723-1724

		Import	Export
Money			
Picis	1000 p.	–	–
Rixdollars	pieces	20	–
Human consumption articles			
Agar-agar	*pikul*	–	–
Arrack	can	15,165	180
Birds' nests	*pikul*	–	–
Coconut	pieces	400	5,500
Gambier	*pikul*	–	–
Oil, coconut	can	–	–
Opium	*pikul*	–	–
Paddy	*pikul*	2,667	667
Rice	*pikul*	4,386	15,778
Salt	*pikul*	840	1,505
Sugar, candy	*pikul*	11	–
Sugar, fine-grain	*pikul*	71	7
Sugar, palm	balls	2,500	5,000
Tea	*pikul*	22	1
Tobacco, Chinese	*pikul*	83	–
Tobacco, Javanese	*pikul*	1,387	2
Trepang	*pikul*	24	358
Manufactured goods			
Bowls	pieces	4,400	2,600
Bowls and plates	pieces	–	–
Bush-knives	pieces	200	500
Chests, Butonese	pieces	320	310
Cloth, Buginese	pieces	–	3,520
Cloth, Chinese	pieces	–	20

Cloth, Indian	pieces	9,340	560
Cloth, Indonesian, Sulawesi excl.	pieces	400	100
Cloth, Selayar's	pieces	160	640
Cloth, Sulawesian, other	pieces	60	–
Knives	pieces	–	–
Linen, Chinese	pieces	–	–
Pans	pieces	1,744	6
Plates	pieces	52,350	750
Silk, woven	rolls	20	–
Other products			
Cotton	*pikul*	35	2
Gold thread	chests	55	–
Iron	*pikul*	72	–
Karet	*pikul*	–	7
Rattan	bundles	1,750	200
Silk, raw	*pikul*	5	–
Slaves	persons	270	71
Wax	*pikul*	18	124

1724-1725

		Import	Export
Money			
Picis	1000 p.	–	–
Rixdollars	pieces	–	–
Human consumption articles			
Agar-agar	*pikul*	–	20
Arrack	can	7,190	–
Birds' nests	*pikul*	–	–
Coconut	pieces	308,000	5,500
Gambier	*pikul*	–	–
Oil, coconut	can	–	–
Opium	*pikul*	–	–
Paddy	*pikul*	1,333	667
Rice	*pikul*	4,631	16,979
Salt	*pikul*	1,400	1,960
Sugar, candy	*pikul*	–	–
Sugar, fine-grain	*pikul*	17	–
Sugar, palm	balls	–	1,000
Tea	*pikul*	10	–
Tobacco, Chinese	*pikul*	151	–
Tobacco, Javanese	*pikul*	2,070	–
Trepang	*pikul*	44	511

Manufactured goods			
Bowls	pieces	4,450	–
Bowls and plates	pieces	–	–
Bush-knives	pieces	–	500
Chests, Butonese	pieces	500	180
Cloth, Buginese	pieces	–	5,700
Cloth, Chinese	pieces	–	10
Cloth, Indian	pieces	9,280	590
Cloth, Indonesian, Sulawesi excl.	pieces	400	20
Cloth, Selayar's	pieces	360	880
Cloth, Sulawesian, other	pieces	120	240
Knives	pieces	–	–
Linen, Chinese	pieces	–	–
Pans	pieces	325	–
Plates	pieces	23,250	–
Silk, woven	rolls	–	–
Other products			
Cotton	*pikul*	4	–
Gold thread	chests	15	–
Iron	*pikul*	29	5
Karet	*pikul*	9	8
Rattan	bundles	2,750	–
Silk, raw	*pikul*	1	–
Slaves	persons	285	82
Wax	*pikul*	24	72

1725-1726

		Import	Export
Money			
Picis	1000 p.	–	–
Rixdollars	pieces	–	–
Human consumption articles			
Agar-agar	*pikul*	–	1,530
Arrack	can	5,400	–
Birds' nests	*pikul*	–	–
Coconut	pieces	27,000	12,000
Gambier	*pikul*	–	–
Oil, coconut	can	–	–
Opium	*pikul*	–	–
Paddy	*pikul*	–	–
Rice	*pikul*	613	17,077
Salt	*pikul*	1,225	735
Sugar, candy	*pikul*	9	–
Sugar, fine-grain	*pikul*	42	10

Sugar, palm	balls	–	8,100
Tea	*pikul*	13	3
Tobacco, Chinese	*pikul*	257	1
Tobacco, Javanese	*pikul*	2,865	3
Trepang	*pikul*	243	952
Manufactured goods			
Bowls	pieces	12,500	2,400
Bowls and plates	pieces	–	–
Bush-knives	pieces	–	5,100
Chests, Butonese	pieces	640	680
Cloth, Buginese	pieces	–	4,800
Cloth, Chinese	pieces	–	–
Cloth, Indian	pieces	15,600	700
Cloth, Indonesian, Sulawesi excl.	pieces	60	–
Cloth, Selayar's	pieces	160	580
Cloth, Sulawesian, other	pieces	130	–
Knives	pieces	144	–
Linen, Chinese	pieces	–	–
Pans	pieces	556	–
Plates	pieces	24,700	2,700
Silk, woven	rolls	–	–
Other products			
Cotton	*pikul*	21	–
Gold thread	chests	30	–
Iron	*pikul*	13	20
Karet	*pikul*	2	9
Rattan	bundles	5,150	–
Silk, raw	*pikul*	4	–
Slaves	persons	309	101
Wax	*pikul*	36	52

1733-1734

		Import	Export
Money			
Picis	1000 p.	–	–
Rixdollars	pieces	6,500	–
Human consumption articles			
Agar-agar	*pikul*	–	1,370
Arrack	can	6,785	–
Birds' nests	*pikul*	–	–
Coconut	pieces	7,010	4,000
Gambier	*pikul*	–	–
Oil, coconut	can	3,750	4,000

Opium	*pikul*	–	–
Paddy	*pikul*	167	3,000
Rice	*pikul*	–	15,656
Salt	*pikul*	455	910
Sugar, candy	*pikul*	–	–
Sugar, fine-grain	*pikul*	20	–
Sugar, palm	balls	–	10,000
Tea	*pikul*	22	–
Tobacco, Chinese	*pikul*	405	–
Tobacco, Javanese	*pikul*	1,900	–
Trepang	*pikul*	457	1,147
Manufactured goods			
Bowls	pieces	10,000	3,000
Bowls and plates	pieces	–	–
Bush-knives	pieces	–	1,500
Chests, Butonese	pieces	40	400
Cloth, Buginese	pieces	–	1,740
Cloth, Chinese	pieces	–	,–
Cloth, Indian	pieces	4,100	220
Cloth, Indonesian, Sulawesi excl.	pieces	100	–
Cloth, Selayar's	pieces	–	220
Cloth, Sulawesian, other	pieces	–	–
Knives	pieces	80	–
Linen, Chinese	pieces	–	–
Pans	pieces	1,460	–
Plates	pieces	37,910	–
Silk, woven	rolls	–	–
Other products			
Cotton	*pikul*	175	–
Gold thread	chests	21	–
Iron	*pikul*	10	–
Karet	*pikul*	–	5
Rattan	bundles	830	–
Silk, raw	*pikul*	–	–
Slaves	persons	29	–
Wax	*pikul*	44	24

1766-1767

		Import	Export
Money			
Picis	1000 p.	815	1,354
Rixdollars	pieces	6,000	–

Human consumption articles			
Agar-agar	*pikul*	45	1,965
Arrack	can	35,680	260
Birds' nests	*pikul*	1	4
Coconut	pieces	–	–
Gambier	*pikul*	–	–
Oil, coconut	can	6,810	–
Opium	*pikul*	9	2
Paddy	*pikul*	167	183
Rice	*pikul*	4,310	2,450
Salt	*pikul*	350	175
Sugar, candy	*pikul*	49	–
Sugar, fine-grain	*pikul*	46	–
Sugar, palm	balls	25,000	–
Tea	*pikul*	124	–
Tobacco, Chinese	*pikul*	1,059	47
Tobacco, Javanese	*pikul*	688	10
Trepang	*pikul*	1,410	4,900
Manufactured goods			
Bowls	pieces	6,000	13,900
Bowls and plates	pieces	31,000	13,760
Bush-knives	pieces	1,770	4,527
Chests, Butonese	pieces	–	–
Cloth, Buginese	pieces	40	2,680
Cloth, Chinese	pieces	–	–
Cloth, Indian	pieces	2,410	2,124
Cloth, Indonesian, Sulawesi excl.	pieces	140	–
Cloth, Selayar's	pieces	–	4,480
Cloth, Sulawesian, other	pieces	–	700
Knives	pieces	2,712	684
Linen, Chinese	pieces	–	160
Pans	pieces	2,455	345
Plates	pieces	8,000	7,070
Silk, woven	rolls	23	–
Other products			
Cotton	*pikul*	455	214
Gold thread	chests	10	37
Iron	*pikul*	–	35
Karet	*pikul*	8	22
Rattan	bundles	–	–
Silk, raw	*pikul*	13	8
Slaves	persons	–	–
Wax	*pikul*	44	59

1767-1768

		Import	Export
Money			
Picis	1000 p.	804	1,830
Rixdollars	pieces	14,000	3,480
Human consumption articles			
Agar-agar	*pikul*	–	600
Arrack	can	15,915	180
Birds' nests	*pikul*	–	–
Coconut	pieces	–	–
Gambier	*pikul*	–	–
Oil, coconut	can	5,400	210
Opium	*pikul*	9	–
Paddy	*pikul*	1,083	–
Rice	*pikul*	5,526	539
Salt	*pikul*	–	385
Sugar, candy	*pikul*	68	3
Sugar, fine-grain	*pikul*	72	–
Sugar, palm	balls	–	–
Tea	*pikul*	50	4
Tobacco, Chinese	*pikul*	533	30
Tobacco, Javanese	*pikul*	443	1
Trepang	*pikul*	2,018	2,376
Manufactured goods			
Bowls	pieces	–	13,360
Bowls and plates	pieces	6,000	8,000
Bush-knives	pieces	620	4,781
Chests, Butonese	pieces	–	–
Cloth, Buginese	pieces	–	9,180
Cloth, Chinese	pieces	–	–
Cloth, Indian	pieces	1,080	2,189
Cloth, Indonesian, Sulawesi excl.	pieces	–	–
Cloth, Selayar's	pieces	–	4,320
Cloth, Sulawesian, other	pieces	–	1,960
Knives	pieces	3,856	5,630
Linen, Chinese	pieces	20	10
Pans	pieces	2,680	260
Plates	pieces	19,000	7,200
Silk, woven	rolls	–	–
Other products			
Cotton	*pikul*	1,631	141
Gold thread	chests	20	1
Iron	*pikul*	170	40
Karet	*pikul*	–	7

Rattan	bundles	–	300
Silk, raw	*pikul*	17	29
Slaves	persons	–	–
Wax	*pikul*	22	60

1768-1769

		Import	Export
Money			
Picis	1000 p.	210	1,651
Rixdollars	pieces	2,000	35,795
Human consumption articles			
Agar-agar	*pikul*	–	1,200
Arrack	can	13,890	520
Birds' nests	*pikul*	–	–
Coconut	pieces	1,000	–
Gambier	*pikul*	–	–
Oil, coconut	can	22,830	–
Opium	*pikul*	14	3
Paddy	*pikul*	500	–
Rice	*pikul*	11,362	1,152
Salt	*pikul*	350	88
Sugar, candy	*pikul*	43	–
Sugar, fine-grain	*pikul*	122	–
Sugar, palm	balls	–	–
Tea	*pikul*	176	–
Tobacco, Chinese	*pikul*	847	38
Tobacco, Javanese	*pikul*	508	–
Trepang	*pikul*	2,144	3,130
Manufactured goods			
Bowls	pieces	105,000	15,400
Bowls and plates	pieces	–	11,700
Bush-knives	pieces	4,800	6,850
Chests, Butonese	pieces	–	–
Cloth, Buginese	pieces	–	5,940
Cloth, Chinese	pieces	–	–
Cloth, Indian	pieces	2,610	1,220
Cloth, Indonesian, Sulawesi excl.	pieces	100	–
Cloth, Selayar's	pieces	–	5,600
Cloth, Sulawesian, other	pieces	–	2,070
Knives	pieces	7,608	8,098
Linen, Chinese	pieces	1,120	360
Pans	pieces	7,250	2,399
Plates	pieces	65,050	28,100
Silk, woven	rolls	2	–

Other products			
Cotton	*pikul*	1,026	123
Gold thread	chests	34	30
Iron	*pikul*	471	96
Karet	*pikul*	9	21
Rattan	bundles	–	–
Silk, raw	*pikul*	21	61
Slaves	persons	–	–
Wax	*pikul*	69	369

1774-1775

		Import	Export
Money			
Picis	1000 p.	–	1,001
Rixdollars	pieces	18,500	22,700
Human consumption articles			
Agar-agar	*pikul*	848	3,920
Arrack	can	14,010	130
Birds' nests	*pikul*	2	–
Coconut	pieces	13,000	–
Gambier	*pikul*	60	–
Oil, coconut	can	11,760	–
Opium	*pikul*	7	1
Paddy	*pikul*	–	250
Rice	*pikul*	5,135	2,585
Salt	*pikul*	385	–
Sugar, candy	*pikul*	65	–
Sugar, fine-grain	*pikul*	37	–
Sugar, palm	balls	7,500	–
Tea	*pikul*	34	–
Tobacco, Chinese	*pikul*	830	49
Tobacco, Javanese	*pikul*	424	–
Trepang	*pikul*	1,152	4,739
Manufactured goods			
Bowls	pieces	–	31,500
Bowls and plates	pieces	59,500	8,400
Bush-knives	pieces	5,300	7,600
Chests, Butonese	pieces	–	–
Cloth, Buginese	pieces	–	7,460
Cloth, Chinese	pieces	–	50
Cloth, Indian	pieces	2,720	1,571
Cloth, Indonesian, Sulawesi excl.	pieces	400	1,700
Cloth, Selayar's	pieces	–	4,680
Cloth, Sulawesian, other	pieces	–	3,630

Knives	pieces	1,200	2,404
Linen, Chinese	pieces	640	420
Pans	pieces	8,961	1,468
Plates	pieces	–	34,275
Silk, woven	rolls	–	–
Other products			
Cotton	*pikul*	126	70
Gold thread	chests	10	29
Iron	*pikul*	250	35
Karet	*pikul*	3	16
Rattan	bundles	2,100	400
Silk, raw	*pikul*	13	66
Slaves	persons	–	–
Wax	*pikul*	36	180

1775-1776

		Import	Export
Money			
Picis	1000 p.	–	1,004
Rixdollars	pieces	6,500	32,280
Human consumption articles			
Agar-agar	*pikul*	1,162	2,300
Arrack	can	22,035	–
Birds' nests	*pikul*	1	–
Coconut	pieces	8,300	–
Gambier	*pikul*	46	–
Oil, coconut	can	34,020	–
Opium	*pikul*	4	1
Paddy	*pikul*	–	858
Rice	*pikul*	5,564	735
Salt	*pikul*	–	53
Sugar, candy	*pikul*	18	–
Sugar, fine-grain	*pikul*	35	5
Sugar, palm	balls	–	–
Tea	*pikul*	150	–
Tobacco, Chinese	*pikul*	787	63
Tobacco, Javanese	*pikul*	1,324	40
Trepang	*pikul*	2,159	5,145
Manufactured goods			
Bowls	pieces	8,000	48,200
Bowls and plates	pieces	10,000	44,800
Bush-knives	pieces	4,360	2,020
Chests, Butonese	pieces	–	–

Cloth, Buginese	pieces	–	5,940
Cloth, Chinese	pieces	–	280
Cloth, Indian	pieces	3,540	1,673
Cloth, Indonesian, Sulawesi excl.	pieces	–	–
Cloth, Selayar's	pieces	–	7,860
Cloth, Sulawesian, other	pieces	–	2,980
Knives	pieces	6,912	480
Linen, Chinese	pieces	1,800	1,770
Pans	pieces	100	85
Plates	pieces	57,000	22,800
Silk, woven	rolls	–	5
Other products			
Cotton	*pikul*	610	376
Gold thread	chests	30	43
Iron	*pikul*	505	56
Karet	*pikul*	2	14
Rattan	bundles	–	300
Silk, raw	*pikul*	47	62
Slaves	persons	–	–
Wax	*pikul*	97	230

1776-1777

		Import	Export
Money			
Picis	1000 p.	–	1,506
Rixdollars	pieces	1,000	17,430
Human consumption articles			
Agar-agar	*pikul*	840	2,400
Arrack	can	11,185	580
Birds' nests	*pikul*	–	–
Coconut	pieces	4,100	–
Gambier	*pikul*	90	–
Oil, coconut	can	27,390	–
Opium	*pikul*	5	1
Paddy	*pikul*	–	600
Rice	*pikul*	7,519	324
Salt	*pikul*	–	–
Sugar, candy	*pikul*	–	–
Sugar, fine-grain	*pikul*	30	–
Sugar, palm	balls	–	–
Tea	*pikul*	160	7
Tobacco, Chinese	*pikul*	830	144
Tobacco, Javanese	*pikul*	958	10
Trepang	*pikul*	2,566	3,820

Manufactured goods			
Bowls	pieces	–	43,200
Bowls and plates	pieces	52,000	16,750
Bush-knives	pieces	4,000	3,280
Chests, Butonese	pieces	–	–
Cloth, Buginese	pieces	300	1,080
Cloth, Chinese	pieces	–	900
Cloth, Indian	pieces	3,400	1,039
Cloth, Indonesian, Sulawesi excl.	pieces	2,000	–
Cloth, Selayar's	pieces	–	5,200
Cloth, Sulawesian, other	pieces	–	1,740
Knives	pieces	5,024	2,964
Linen, Chinese	pieces	2,200	3,375
Pans	pieces	5,280	2,620
Plates	pieces	–	11,200
Silk, woven	rolls	–	–
Other products			
Cotton	*pikul*	102	358
Gold thread	chests	32	48
Iron	*pikul*	375	64
Karet	*pikul*	2	3
Rattan	bundles	500	2,460
Silk, raw	*pikul*	46	37
Slaves	persons	–	–
Wax	*pikul*	248	298

1786-1787

		Import	Export
Money			
Picis	1000 p.	–	150
Rixdollars	pieces	3,000	43,430
Human consumption articles			
Agar-agar	*pikul*	530	2,690
Arrack	can	45,148	1,910
Birds' nests	*pikul*	4	10
Coconut	pieces	–	–
Gambier	*pikul*	285	83
Oil, coconut	can	28,050	300
Opium	*pikul*	2	–
Paddy	*pikul*	–	–
Rice	*pikul*	7,344	400
Salt	*pikul*	385	630
Sugar, candy	*pikul*	–	–
Sugar, fine-grain	*pikul*	20	4

Sugar, palm	balls	–	–
Tea	*pikul*	–	2
Tobacco, Chinese	*pikul*	913	171
Tobacco, Javanese	*pikul*	3,672	709
Trepang	*pikul*	2,625	6,490
Manufactured goods			
Bowls	pieces	1,000	33,200
Bowls and plates	pieces	80,000	72,100
Bush-knives	pieces	25,900	13,480
Chests, Butonese	pieces	–	–
Cloth, Buginese	pieces	–	2,740
Cloth, Chinese	pieces	100	1,180
Cloth, Indian	pieces	9,576	4,576
Cloth, Indonesian, Sulawesi excl.	pieces	840	220
Cloth, Selayar's	pieces	–	1,200
Cloth, Sulawesian, other	pieces	–	1,740
Knives	pieces	10,108	14,220
Linen, Chinese	pieces	3,905	7,261
Pans	pieces	14,620	3,656
Plates	pieces	–	3,000
Silk, woven	rolls	8	57
Other products			
Cotton	*pikul*	3,157	90
Gold thread	chests	63	48
Iron	*pikul*	1,600	346
Karet	*pikul*	13	81
Rattan	bundles	–	3,000
Silk, raw	*pikul*	70	49
Slaves	persons	516	1,238
Wax	*pikul*	333	361

1787-1788

		Import	Export
Money			
Picis	1000 p.	–	–
Rixdollars	pieces	10,100	43,405
Human consumption articles			
Agar-agar	*pikul*	420	3,210
Arrack	can	55,205	–
Birds' nests	*pikul*	6	11
Coconut	pieces	1,000	–
Gambier	*pikul*	145	26
Oil, coconut	can	15,600	1,500

Opium	*pikul*	16	2
Paddy	*pikul*	–	83
Rice	*pikul*	9,596	741
Salt	*pikul*	315	315
Sugar, candy	*pikul*	20	34
Sugar, fine-grain	*pikul*	32	6
Sugar, palm	balls	–	–
Tea	*pikul*	64	–
Tobacco, Chinese	*pikul*	723	131
Tobacco, Javanese	*pikul*	1,072	153
Trepang	*pikul*	2,772	8,325
Manufactured goods			
Bowls	pieces	100,540	33,500
Bowls and plates	pieces	–	40,900
Bush-knives	pieces	4,500	13,790
Chests, Butonese	pieces	–	–
Cloth, Buginese	pieces	–	5,860
Cloth, Chinese	pieces	4,000	390
Cloth, Indian	pieces	7,100	1,314
Cloth, Indonesian, Sulawesi excl.	pieces	400	60
Cloth, Selayar's	pieces	–	2,520
Cloth, Sulawesian, other	pieces	–	1,200
Knives	pieces	5,000	12,732
Linen, Chinese	pieces	5,800	4,795
Pans	pieces	17,206	2,929
Plates	pieces	3,200	34,940
Silk, woven	rolls	–	13
Other products			
Cotton	*pikul*	3,437	500
Gold thread	chests	33	129
Iron	*pikul*	845	124
Karet	*pikul*	8	28
Rattan	bundles	–	2,200
Silk, raw	*pikul*	91	47
Slaves	persons	1,037	1,283
Wax	*pikul*	158	176

1788-1789

		Import	Export
Money			
Picis	1000 p.	–	–
Rixdollars	pieces	2,000	47,480

Human consumption articles			
Agar-agar	*pikul*	1,324	2,120
Arrack	can	14,520	2,260
Birds' nests	*pikul*	20	15
Coconut	pieces	–	–
Gambier	*pikul*	300	6
Oil, coconut	can	34,785	–
Opium	*pikul*	33	22
Paddy	*pikul*	567	–
Rice	*pikul*	16,527	441
Salt	*pikul*	1,750	123
Sugar, candy	*pikul*	–	3
Sugar, fine-grain	*pikul*	–	5
Sugar, palm	balls	–	–
Tea	*pikul*	180	10
Tobacco, Chinese	*pikul*	1,020	98
Tobacco, Javanese	*pikul*	2,444	125
Trepang	*pikul*	2,890	6,390
Manufactured goods			
Bowls	pieces	–	25,510
Bowls and plates	pieces	1,000	66,100
Bush-knives	pieces	3,400	9,670
Chests, Butonese	pieces	–	–
Cloth, Buginese	pieces	–	5,200
Cloth, Chinese	pieces	850	730
Cloth, Indian	pieces	6,480	3,138
Cloth, Indonesian, Sulawesi excl.	pieces	300	–
Cloth, Selayar's	pieces	–	1,460
Cloth, Sulawesian, other	pieces	200	500
Knives	pieces	7,800	11,928
Linen, Chinese	pieces	4,020	5,677
Pans	pieces	15,325	6,170
Plates	pieces	141,000	22,300
Silk, woven	rolls	50	52
Other products			
Cotton	*pikul*	2,109	135
Gold thread	chests	5	160
Iron	*pikul*	772	145
Karet	*pikul*	21	35
Rattan	bundles	–	4,600
Silk, raw	*pikul*	108	72
Slaves	persons	867	984
Wax	*pikul*	66	285

1796-1797

		Import	Export
Money			
Picis	1000 p.	–	–
Rixdollars	pieces	2,600	31,200
Human consumption articles			
Agar-agar	*pikul*	250	1,460
Arrack	can	50,175	900
Birds' nests	*pikul*	27	5
Coconut	pieces	7,700	–
Gambier	*pikul*	251	40
Oil, coconut	can	14,390	–
Opium	*pikul*	46	21
Paddy	*pikul*	133	–
Rice	*pikul*	13,553	956
Salt	*pikul*	–	420
Sugar, candy	*pikul*	30	–
Sugar, fine-grain	*pikul*	76	10
Sugar, palm	balls	–	–
Tea	*pikul*	–	6
Tobacco, Chinese	*pikul*	–	29
Tobacco, Javanese	*pikul*	2,718	524
Trepang	*pikul*	1,262	2,501
Manufactured goods			
Bowls	pieces	1,000	6,000
Bowls and plates	pieces	–	28,900
Bush-knives	pieces	–	10,024
Chests, Butonese	pieces	–	–
Cloth, Buginese	pieces	–	940
Cloth, Chinese	pieces	–	140
Cloth, Indian	pieces	3,640	3,371
Cloth, Indonesian, Sulawesi excl.	pieces	–	120
Cloth, Selayar's	pieces	–	4,040
Cloth, Sulawesian, other	pieces	–	–
Knives	pieces	–	456
Linen, Chinese	pieces	–	350
Pans	pieces	450	70
Plates	pieces	–	4,500
Silk, woven	rolls	–	–
Other products			
Cotton	*pikul*	283	90
Gold thread	chests	–	216
Iron	*pikul*	410	130
Karet	*pikul*	2	25

Rattan	bundles	800	600
Silk, raw	*pikul*	–	43
Slaves	persons	496	967
Wax	*pikul*	145	261

Source: Harbourmasters' registers
Comment: Under arrack is included *inlandse gedestilleerde wateren* (indigenous liquor), *likeur* (liquor) and *brandewijn* (brandy).
Under sugar, fine-grain, is also included *stoksuiker*, 'stick sugar'.
With sugar, palm, is meant *bruine suiker* (brown sugar) or *Javaanse suiker* (Javanese sugar).
Under tobacco, Javanese, is included tobacco from Cirebon.
With bowls are meant *kommen* (bowls) and *kommetjes* (small bowls).
Bowls and plates are *kommen en piring*, not included *theekopjes en piring* (teacups and saucers).
Bush-knives, a sort of machetes, are *beliung* as well as *parang*.
Under cloth, Buginese, or *Buginese kleden* is included cloth from Bira, Bone, Singkang and Wajo, but not from Mandar, Buton, Makassar or Selayar. *Boekoe, cele cele* and *toope* were considered to be Buginese sorts of cloth.
With cloth, Chinese, is meant cloth, other than linen and silk, in which it is especially noted that it was from China or Macao, for instance Chinese *doeken* (fabrics), *stoffen* (fabrics), *neusdoeken* (handkerchiefs), chintzes, *gingam, guinees* and *salempores*, in so far as they were sold in pieces or corgs and not in rolls. Under these are also included *caul*, although it was only stated in a minority of the cases that they were from China. Both Van Santen (1982) and Laarhoven (1994) do not mention caul under Indian textiles.
Under cloth, Indian, is included *adatis, armosins, baftas, cambayas, cannekins, cassas, chelas,* chintzes, *cindais, committers, gerasses, gingams, gobars* (or *kambars*), *guinees* (or *lijnwaden*), *hammans, kamkanis, karikams, muris, patolus, rumals* (or *neusdoeken*), *salempores, sanas, sarasses, sologesies* (or *epos*), *tapis*. Not included were specific products as blankets, bedcovers, sailcloth, cloth for flags, carpets and *omhangsels* (covers). *Neusdoeken* (handkerchiefs) were considered to be the same as *rumals* (Laarhoven 1994: Appendices 53).
With cloth, Indonesian, Sulawesi excluded, is meant cloth from Java, Madura, Bali, Lombok and Sumba, as well as *Maleise kleden* (Malay cloth). Not included are *baju* (blouses) and *sarong* (cloth to cover the lower parts of the body).
Under cloth, Selayar's, is also included Selayar's *gingam* and *lipalipa*.
With cloth, Sulawesian, other, is meant Makassarese, Mandarese and Butonese cloth. Among Makassarese cloth is also included Makassarese *gingam*.
Under knives are also included *knipmessen* (clasp-knives).
Under linen, Chinese, is also included *Chinees lijnwaad* (Chinese cloth).
Under pans are included small and big ones as well as the *kuali*-type of pans.
Under plates are included *schotels*, which is Dutch for plates, as well as *piring*, its Malay equivalent.
Under silk, woven, is also included *damast* (damask), *poolzijde* (thrum silk?) and *satijn* (satin). *Stoffen* (fabrics) by the roll with no explicit mentioning of silk are excluded from this category.
Under iron is not included Belitung iron, measured by the piece, which only occurred in the year 1767-1768.

Table U. Estimated prices of the most important private sector commodities in rixdollars (rounded-off)

First part of the eighteenth century

Money	
Picis	1,000 p.
	not relevant
Rixdollars	pieces
	1.0
Human consumption articles	
Agar-agar	*pikul*
	1730 = 0.5 (VOC 2163:132-9)
Arrack	can
	1719, between tax farmers = 0.11 (VOC 1926:29)
	1724, VOC imports = 0.13 (BG 10763:148-9)
	1743, between tax farmers = 0.17 (VOC 2606:20-1)
	Estimate = 0.15
Birds' nests	*pikul*
	not relevant
Coconut	pieces
	Estimate = 0.01, considering the conclusion for the second part of the century
Gambier	*pikul*
	not relevant
Oil, coconut	can
	1697 = 0.04 (VOC 1595:325)
Opium	*pikul*
	not relevant
Paddy	*pikul*
	Estimate = 0.33, one-third of the price of rice, considering the situation in the second part of the century
Rice	*pikul*
	1705 = 1.0 (VOC 1711:353)
	1735 = 0.8-1.0 (VOC 755:48)
	Estimate = 1.0
Salt	*pikul*
	1724, in store by VOC Makassar = 0.5 (BG 10763:371)
Sugar, candy	*pikul*
	1724, VOC Batavia = 8.39 (BG 10763:106)
	Estimate = 11
Sugar, fine-grain	*pikul*
	1724, VOC imports = 4.17 (BG 10763:148-9)
	Estimate = 5.5
Sugar, palm	balls

	Estimate = 0.001, considering the conclusion for the second part of the century
Tea	*pikul* 1724, in store by VOC Batavia = 36.56 (BG 10763:175) 1724, average of two VOC shipments in Batavia = 47.28 (BG 10763:67, 74) Estimate = 60
Tobacco, Chinese	*pikul* 1741 = 40 (VOC 2568:358)
Tobacco, Javanese	*pikul* Estimate = 8.0, one-fifth of the price of Chinese tobacco, considering the situation in the second part of the century
Trepang	*pikul* 1730, stone = 10 (VOC 2163:132-9) 1730, black = 6 (VOC 2163:132-9) 1730, white = 2 (VOC 2163:132-9) Estimate = 5.6, considering the share of these sorts in the exports of Makassar during the period 1722-1726
Manufactured goods	
Bowls	pieces Estimate = 0.08, two-thirds of the price of plates, considering the situation in the second part of the century
Bowls and plates	pieces not relevant
Bush-knives	pieces 1683, from Luwu = 0.2-0.5 (VOC 1376:86) Estimate= 0.35
Chests, Butonese	pieces Estimate = 0.35, assuming that one chest might be somehow of the same order as a bush-knife
Cloth, Buginese	pieces 1724, from Bira = 0.29 (VOC 10763:372, 375) Estimate = 0.30
Cloth, Chinese	pieces not relevant
Cloth, Indian	pieces Gerasses, which constituted about three-quarters of the total turnover (Chapter IV) 1711 = 1.5-1.75 (VOC 1808:55) 1737, VOC sales = 2.25 (VOC 2381:1005-6) 1743 = 2.0 (VOC 2568:358) Chintzes, which constituted about one-quarter of the total turnover

	1711, VOC auction, coarse wide = 2.0 (VOC 1808:54)
	1737, VOC sales, from Surat = 1.12 (VOC 2381:1005-6)
	Estimate for gerasses = 2.0
	Estimate chintzes = 2.0
	Estimate for Indian cloth in general = 2.0
Cloth, Indonesian, Sulawesi excl.	pieces
	Estimate = 1.0, assuming the same as for the second part of the century
Cloth, Selayar's	pieces
	1706 = 0.66 (VOC 1728:81)
	1724 = 0.63 (BG 10763:372, 375)
	Estimate = 0.65
Cloth, Sulawesian, other	pieces
	Estimate = 0.30, assuming that it was of about the same level as Buginese cloth
Knives	pieces
	1741 = 0.05 (VOC 2568:358)
Linen, Chinese	pieces
	not relevant
Pans	pieces
	Estimate = 1.0, assuming the same as in the second part of the century
Plates	pieces
	1724, in store by VOC Makassar = 0.12 (BG 10763:371)
Silk, woven	rolls
	1724, VOC exports from Batavia to Colombo = 19.12 (BG 10763:228)
	1724, black satin, VOC exports from Batavia to Japan = 15.76 (BG 10763:322)
	Estimate = 22
Other products	
Cotton	*pikul*
	Estimate = 5.0, assumed a little below the level of the second part of the century
Gold thread	chests
	Estimate = 50, considering the conclusion for the second part of the century
Iron	*pikul*
	1723, VOC imports = 6.25 (BG 10762:50)
	1726, VOC imports = 5.21 (BG 10764:133-5)
	1730 = 10 (VOC 2163:132-9)
	Estimate = 8.0
Karet	*pikul*
	1715 = 110-115 (VOC 1867:50)
	1722, VOC exports = 119.79 (BG 10762:50)

	1730 = 80 (VOC 2163:132-9) Estimate = 110
Rattan	bundles 1730, administration Vlaardingen = 0.25 (VOC 2192:788-91) 1739, from Pasir, administration Vlaardingen = 0.31 (VOC 2466:1991) Estimate = 0.25
Silk, raw	*pikul* 1724, Chinese, VOC exports from Batavia = 286 (BG 10763:70) Estimate = 300
Slaves	persons 1743, VOC contract = 40 (VOC 2628:419) Estimate = 40
Wax	*pikul* 1722, VOC exports = 22.5 (BG 10762:50) 1730 = 20 (VOC 2163:132-9) 1734, VOC exports = 27.6 (BG 10769:57) Estimate = 22.5

Second part of the eighteenth century

Money

Picis	1,000 p. 2.67 (*Verhandeling* 1786:296-7, 321)
Rixdollars	pieces 1.0

Human consumption articles

Agar-agar	*pikul* 1755, Amoy junk = 1.37 (VOC 2859:190-2)
Arrack	can 1766, VOC sales = 0.06 (VOC 3210-3:21-4) 1767, VOC imports = 0.13 (BG 10788:97-8) 1769 = 0.09-0.14 (Koopmansboeken 16:31-12-1769) 1787, VOC imports = 0.13 (BG 10799:174-5) Estimate = 0.12
Birds' nests	*pikul* 1779, Java, VOC purchases = 591 (VOC 3555-5:20-12-1779) 1780, Java, VOC purchases = 705 (VOC 3584-6:20-12-1780) Estimate = 700
Coconut	pieces 1810, Gresik = 0.015 (H 379-staat C-3)

	Estimate = 0.015
Gambier	*pikul*
	1777, Semarang, VOC auction = 5 (VOC 3497-4:273)
	1780s, Batavia = 8.0 (De Rovere van Breugel 1856:124)
	Estimate = 8.0
Oil, coconut	can
	1756, from Ende = 0.15 (VOC 2883:152)
	1769 = 0.09-0.10 (Koopmansboeken 16:31-12-1769)
	Estimate = 0.12
Opium	*pikul*
	1764, Batavia, VOC sales to the Amphioen Sociëteit = 550 (Baud 1853:141)
	1777, Semarang, VOC auction = 812.5 (VOC 3497-4:273)
	Estimate = 800
Paddy	*pikul*
	1762, VOC sales = 0.37 (VOC 3058-3:111-3)
Rice	*pikul*
	1762, VOC sales = 1.2 (VOC 3058-3:111-3)
	1764, VOC sales = 1.6 (VOC 3120:55)
	1769 = 1.47 (Koopmansboeken 16:31-12-1769)
	1769 = 2.0 (Koopmansboeken 16:31-5-1769)
	Estimate = 1.5
Salt	*pikul*
	1787, VOC imports = 0.2 (BG 10799:174-5)
	Estimate = 0.3
Sugar, candy	*pikul*
	1770, Batavia, purchases = 8.0 (Koopmansboeken 16:18-10-1770)
	1769 = 10.6 (Koopmansboeken 16:31-5-1769)
	Estimate = 11
Sugar, fine-grain	*pikul*
	1769, Batavia, purchases = 4.5 (Koopmansboeken 16:31-12-1769)
	Estimate = 6.0
Sugar, palm	balls
	1810, Gresik = 0.001 (H 379-staat C-3; Knaap 1996:190-2)
	Estimate = 0.001
Tea	*pikul*
	1755, Amoy junk = 130 (VOC 2859:190-2)
	1769 = 125 (Koopmansboeken 16:31-12-1769)
	1776, Batavia, VOC shipments = 28.87 (BG 10792:94)
	Estimate = 100
Tobacco, Chinese	*pikul*

	1755, Amoy junk = 35 (VOC 2859:190-2)
	1766, Amoy junk = 38 (VOC 3181-3:53-4)
	Estimate = 37
Tobacco, Javanese	*pikul*
	1781 = 4 (VOC 3598-2:154)
	1780s, estimate for Java = 8-12 (Knaap 1996:129)
	Estimate = 8.0
Trepang	*pikul*
	1755, Amoy junk, probably stone = 27.5 (VOC 2859:190-2)
	1755, Amoy junk, gama = 8.5 (VOC 2859:190-2)
	1755, Amoy junk, pandang = 17.5 (VOC 2859:190-2)
	1755, Amoy junk, yellow = 8.5 (VOC 2859:190-2)
	1755, Amoy junk, black = 32 (VOC 2859:190-2)
	1755, Amoy junk, sangolo = 23 (VOC 2859:190-2)
	1755, Amoy junk, sand = 27.5 (VOC 2859:190-2)
	1755, Amoy junk, average for the entire cargo = 21 (VOC 2859:190-2)
	1788, stone = 15-55 (VOC 3858-5:5-8)
	1788, black = 10-47.5 (VOC 3858-5:5-8)
	1788, gama = 20 (VOC 3858-5:5-8)
	1788, pandang = 26.9 (VOC 3858-5:5-8)
	1788, japong = 15 (VOC 3858-5:5-8)
	1788, sand = 77.5 (VOC 3858-5:5-8)
	1788, taykonkong = 16.9 (VOC 3858-5:5-8)
	1788, koni = 12.5 (VOC 3858-5:5-8)
	1788, mose = 11.2 (VOC 3858-5:5-8)
	1788, longe = 10.6 (VOC 3858-5:5-8)
	1788, marege = 13.7-16.2 (VOC 3858-5:5-8)
	Estimate after 1780 = 24.5; before 1780 = 22.5
Manufactured goods	
Bowls	pieces
	1755, Amoy junk, average seven sorts = 0.02 (VOC 2859:190-2)
	1758, VOC sales = 0.08 (VOC 2933-2:77-8)
	1768, VOC sales = 0.08 (VOC 3243-3:114-9)
	Estimate = 0.05
Bowls and plates	pieces
	Assumed sum of single bowls and plates = 0.12
Bush-knives	pieces
	1769, Semarang, VOC sales = 0.33 (VOC 3362-3:287)
	Estimate = 0.35
Chests, Butonese	pieces
	not relevant
Cloth, Buginese	pieces
	1762, VOC sales, from Bira = 0.31 (VOC 3058-3:111-3)

	1762, from Bira = 0.79 (Koopmansboeken 16:1-7-1762)
	1789, VOC sales, from Bira = 0.16 (VOC 3858-3:17-8)
	Estimate = 0.40
Cloth, Chinese	pieces
	Estimate = 4.0, assumed it was more or less equal to Indian cloth
Cloth, Indian	pieces
	Chintzes, which constituted about three-fifths of the total turnover
	1762, VOC sales, ordinary wide Surat = 2.60 (VOC 3058-3:111-3)
	1766, VOC sales, Kasimbasar's = 2.37 (VOC 3210-3:21-4)
	1766, VOC sales, ordinary narrow Surat = 1.62 (VOC 3210-3:4-8)
	1767, VOC sales, ordinary wide Surat = 2.97 (VOC 3210-3:85)
	1786, VOC sales, ordinary wide Surat = 3.33 (VOC 3732-3:25)
	1786, VOC sales, Kasimbasar's = 2.65 (VOC 3732-3:25)
	1789, VOC sales, ordinary wide Surat = 3.65 (VOC 3858-3:17-8)
	1789, VOC sales, Kasimbasar's = 2.48 (VOC 3858-3:17-8)
	Cassas, which constituted about two-fifths of the total turnover
	1766, VOC sales, bird-design with golden heads, third quality = 6.75 (VOC 3210-3:27-8)
	1766, VOC sales, bird-design with golden heads, fourth quality = 6.25 (VOC 3210-3:27-8)
	Estimate for chintzes before 1780 = 2.5; after 1780 = 3.0
	Estimate for cassas = 6.5
	Estimate for Indian cloth in general: before 1780 = 4.0; after 1780 = 4.5
Cloth, Indonesian, Sulawesi excl.	pieces
	1770s, estimate for Java = 0.5-1.0 (Knaap 1996:132)
	Estimate = 1.0
Cloth, Selayar's	pieces
	1762 = 0.25-0.50 (Koopmansboeken 16:1-7-1762)
	1766, VOC sales = 0.50 (VOC 3210-3:4-8)
	1766 = 0.15-0.35 (Koopmansboeken 16:31-5-1766)
	1766 = 0.25-0.50 (Koopmansboeken 16:15-10-1766)
	Estimate = 0.40
Cloth, Sulawesian, other	pieces
	Estimate = 0.40, assumed equal to Buginese cloth

Knives	pieces Estimate = 0.05, assumed one-seventh of a bush-knife as in the first part of the century
Linen, Chinese	pieces 1755, Amoy junk = 5.0 (VOC 2859:190-2) 1787, VOC Batavia imports from Canton = 1.33 (BG 10799:52) 1787, VOC Batavia = 2.11 (BG 10799:93) Estimate before 1780 = 5.0; after 1780 = 2.5
Pans	pieces 1755, Amoy junk, big ones = 5.5 (VOC 2859:190-2) Estimate = 1.0, for big and small ones on average
Plates	pieces 1755, Amoy junk, average eleven sorts = 0.04 (VOC 2859:190-2) 1758, VOC sales = 0.11 (VOC 2933-2:77-8) 1767, VOC sales, table-dishes = 0.09 (VOC 3273-3:106-7) Estimate = 0.07
Silk, woven	rolls 1755, Amoy junk = 20 (VOC 2859:190-2) 1755, Amoy junk, satin = 10 (VOC 2859:190-2) Estimate = 15
Other products	
Cotton	*pikul* 1768, VOC sales = 7.0 (VOC 3243-3:31-4) 1781 = 3.0 (VOC 3598:154) Estimate before 1780 = 6.0; after 1780 = 3.0
Gold thread	chests 1755, Amoy junk = 11 (VOC 2859:190-2); this price probably pertains to a small chest rather than a large chest, considering the fact that the VOC in Java already paid 37.29 for 1 *pikul* of cotton-yarn (*Verhandeling* 1786:333) Estimate = 50
Iron	*pikul* 1761 = 10 (Koopmansboeken 16:8-3-1761) 1762, VOC sales = 9.37 (VOC 3358:111-3) 1766 = 15 (Koopmansboeken 16:20-4-1766) 1767, VOC imports = 6.77 (BG 10788:98) 1787, VOC imports = 5.46 (BG 10799:174-5) Estimate = 10
Karet	*pikul* Estimate = 225, about ten times as much as trepang considering the difference in freight-rates between these products (Koopmansboeken 16:32-12-1769)
Rattan	bundles

	1755, Amoy junk = 0.25 (VOC 2859:190-2)
Silk, raw	*pikul*
	1755, Amoy junk = 300 (VOC 2859:190-2)
	1765, VOC purchases in Canton = 303 (Jörg 1982:343)
	1785, VOC purchases in Canton = 120 (Jörg 1982:343)
	Estimate before 1780 = 300; after 1780 = 200
Slaves	persons
	1769, males and females = 63 (Koopmansboeken 16:9-12-1769)
	1769, males and females = 44 (Koopmansboeken 16:31-12-1769)
	1782, boys = rising from 18-20 to 30-34 (VOC 3623-2:83)
	1782 girls = rising from 25-35 to 60-80 (VOC 3623-2:83)
	1784, boys = 65 (VOC 3760:7)
	Estimate after 1780 = 60; before 1780 = 50
Wax	*pikul*
	1755, Amoy junk = 27.5 (VOC 2859:190-2)

Comment: When the information is classified as 'not relevant', it means that this particular commodity is not mentioned in the period under consideration. In case an estimate for Makassar had to be made on the basis of prices in Java or on the basis of VOC imports in Makassar an extra margin of roughly 30% has been applied, except when it concerned products which were also produced in Sulawesi itself.

Table V. Annual average number of private sector cargoes and loads carried on selected routes (rounded-off)

	Number of ship mov.		No merchand.		With merchand.		Number of loads		Aver. loads per mov.	
	inc.	out.	inc.	out.	inc.	out.	inc.	out.	inc.	out.
1722-1726										
General	249	273	86	140	163	133	452	361	2.77	2.71
Batavia	32	30	2	3	30	27	212	128	7.06	4.74
Semarang	45	52	1	22	44	30	52	46	1.18	1.53
Banjarmasin	12	12	1	1	11	11	69	35	6.27	3.18
Pasir	10	12	1	4	9	8	12	20	1.33	2.50
Kaili	8	10	2	7	6	3	7	5	1.17	1.67
Sumbawa	28	36	14	31	14	5	14	8	1.00	1.60
Bima	47	49	29	45	18	4	22	9	1.22	2.25
Ambon	14	13	14	1	0	12	0	18	0.00	1.50
Banda	10	10	9	1	1	9	1	13	1.00	1.44
1766-1769										
General	247	308	41	122	206	186	415	424	2.01	2.28
Batavia	26	26	3	9	23	17	157	40	6.83	2.35
Semarang	9	9	0	3	9	6	31	8	3.44	1.33
Sumbawa	74	111	13	26	61	85	75	160	1.23	1.88
Bima	6	11	2	5	4	6	5	18	1.25	3.00
Bugis	15	14	2	2	13	12	15	26	1.15	2.17
Buton	20	20	2	3	18	17	18	57	1.00	3.35
Bonerate	67	72	13	58	54	14	55	40	1.02	2.86
Ende	6	7	0	0	6	7	6	23	1.00	3.29
Ambon	5	5	0	0	5	5	5	27	1.00	5.40
1774-1777										
General	189	242	11	27	178	215	359	490	2.02	2.28
Batavia	23	23	0	9	23	14	109	32	4.74	2.29
Semarang	12	14	0	0	12	14	43	22	3.58	1.57
Sumbawa	58	97	2	6	56	91	71	158	1.27	1.74
Bima	14	19	2	4	12	15	16	37	1.33	2.47
Bugis	16	17	1	1	15	16	17	47	1.13	2.94
Buton	22	25	1	0	21	25	30	80	1.43	3.20
Bonerate	13	14	1	2	12	12	18	37	1.50	3.08
Ende	8	8	0	0	8	8	8	19	1.00	2.38
Amoy	1	1	0	0	1	1	18	5	18.00	5.00

1786-1789										
General	257	332	14	29	243	303	607	934	2.50	3.08
Batavia	27	25	1	0	26	25	167	83	6.42	3.32
Semarang	21	22	1	3	20	19	51	29	2.55	1.53
Sumbawa	101	170	4	18	97	152	169	336	1.74	2.21
Bima	7	8	0	1	7	7	14	22	2.00	3.14
Bugis	23	24	1	2	22	22	35	82	1.59	3.72
Buton	34	33	1	0	33	33	64	168	1.94	5.09
Bonerate	18	20	1	1	17	19	31	84	1.82	4.42
Ende	6	7	0	0	6	7	13	35	2.17	5.00
Amoy	1	1	0	0	1	1	19	8	19.00	8.00

Source: Harbourmasters' registers
Comment: The no-merchandise-category concerns *niets*, meaning 'nothing at all', *onbekend*, 'unknown', and *mondkost*, 'victuals'.

Table W. Annual average number of private sector cargoes and loads carried by selected groups of skippers on the most important routes (rounded-off)

	Number of ship mov.		No merchand.		With merchand.		Number of loads		Aver. loads per mov.	
	inc.	out.	inc.	out.	inc.	out.	inc.	out.	inc.	out.
1722-1726										
General	249	273	86	140	163	133	452	361	2.77	2.71
Chin.-Amoy	–	–	–	–	–	–	–	–	–	–
Chin.-Other	16	15	10	2	6	13	37	29	6.17	2.23
- Batavia	4	4	0	0	4	4	30	14	7.50	3.50
- Ambon	7	7	7	1	0	6	0	10	0.00	1.67
Burgher	24	26	14	7	10	19	47	27	4.70	1.42
- Batavia	7	6	0	1	7	5	41	18	5.86	3.60
- Banda	7	8	6	1	1	7	1	10	1.00	1.43
- Ambon	6	6	6	0	0	6	0	7	0.00	1.17
Wajorese	33	36	3	6	30	30	167	126	5.57	4.20
- Batavia	13	12	0	0	13	12	108	72	8.31	6.00
- Semarang	7	8	0	3	7	5	7	10	1.00	2.00
- Banjarm.	6	5	0	0	6	5	36	19	6.00	3.80
1766-1769										
General	247	308	41	122	206	186	415	424	2.01	2.28
Chin.-Amoy	<1	<1	0	0	<1	<1	<11	<1	32.00	2.00
Chin.-Other	47	50	5	4	42	46	118	139	2.81	3.02
- Batavia	7	8	1	1	6	7	63	20	10.50	2.86
- Sumbawa	21	25	2	1	19	24	28	66	1.47	2.75
- Bugis	7	6	1	0	6	6	6	12	1.00	2.00
- Buton	5	5	0	1	5	4	5	11	1.00	2.75
Burgher	11	10	1	8	10	2	34	6	3.40	2.00
- Batavia	7	7	1	7	6	0	24	0	4.00	0.00
Comp.Subj.	115	126	21	77	94	49	100	95	1.06	1.94
- Sumbawa	28	37	6	12	22	25	24	39	1.09	1.56
- Buton	5	5	0	2	5	3	7	13	1.40	4.33
- Bonerate	56	60	11	53	45	7	46	18	1.02	2.57
1774-1777										
General	189	242	11	27	178	215	359	490	2.02	2.28
Chin.-Amoy	1	1	0	0	1	1	18	5	18.00	5.00
Chin.-Other	55	56	3	2	52	54	110	163	2.12	3.02
- Batavia	7	7	0	0	7	7	43	15	6.14	2.14
- Sumbawa	24	23	0	1	24	22	33	62	1.38	2.81
- Bima	6	5	1	1	5	4	8	24	1.60	6.00
- Bugis	6	8	0	0	6	8	7	24	1.17	3.00
- Buton	6	6	0	0	6	6	8	14	1.33	2.33

Malay	26	26	0	4	26	22	43	55	1.65	2.50
- Sumbawa	7	8	0	2	7	6	8	10	1.14	1.67
Comp.Subj.	44	49	3	8	41	41	51	87	1.24	2.12
- Sumbawa	18	22	1	2	17	20	21	34	1.23	1.70
- Buton	5	6	0	0	5	6	7	18	1.40	3.00
- Bonerate	7	7	1	2	6	5	8	16	1.33	3.20
1786-1789										
General	257	332	14	29	243	303	607	934	2.50	3.08
Chin.-Amoy	1	1	0	0	1	1	19	8	19.00	8.00
Chin.Other	87	92	3	4	84	88	220	317	2.62	3.60
- Batavia	10	11	0	0	10	11	69	39	6.90	3.55
- Sumbawa	44	51	1	2	43	49	84	163	1.95	3.33
- Bugis	11	12	0	0	11	12	18	39	1.63	3.25
Malay	54	60	5	5	49	55	133	202	2.71	3.67
- Sumbawa	19	28	1	3	18	25	30	62	1.67	2.48
- Buton	5	5	0	0	5	5	9	30	1.80	6.00
- Bonerate	5	6	0	0	5	6	9	27	1.80	4.50
- Ende	5	6	0	0	5	6	10	29	2.00	4.83
Comp.Subj.	51	62	3	14	48	48	81	131	1.69	2.73
- Sumbawa	30	38	1	11	29	27	43	45	1.48	1.67
- Buton	6	6	0	0	6	6	12	31	2.00	5.17
- Bonerate	7	8	1	1	6	7	12	30	2.00	4.29

Source: Harbourmasters' registers
Comment: See Table V.

Table X. Annual average private sector imports into and exports from Makassar of selected commodities on the most important routes (rounded-off)

Batavia		1724-1726	1766-1769	1774-1777	1786-1789
Imports					
Rice	*pikul*	306	1,323	675	307
Sugar, candy	*pikul*	7	52	20	7
Sugar, fine-g.	*pikul*	44	61	13	7
Tobacco, Ch.	*pikul*	299	596	47	102
Tobacco, Jav.	*pikul*	5	120	21	317
Gambier	*pikul*	–	–	47	135
Tea	*pikul*	22	58	1	–
Salt	*pikul*	335	–	–	82
Shellac	*pikul*	11	16	2	42
Lead	*pikul*	5	5	54	43
Iron	*pikul*	49	212	367	1,072
Oil, coconut	10 can	–	34	40	–
Arrack	10 can	884	2,004	1,604	3,781
Anise	10 can	–	–	–	227
Beer	10 can	5	5	162	179
Beer and wine	10 can	–	65	53	78
Wine	10 can	27	71	68	152
Jenever	10 can	–	36	42	204
Paving-stones	100 pieces	1	–	49	–
Bowls and plates	100 pieces	–	103	48	–
Plates	100 pieces	60	90	7	–
Cups and jars	100 pieces	63	5	3	2
Tobacco pipes	100 pieces	23	–	–	–
Boxes, n. cop.	100 pieces	23	1	–	–
Bush-knives	100 pieces	1	24	46	113
Knives	100 pieces	3	44	44	76
Mirrors	100 pieces	–	50	8	31
Cloth, Indian	pieces	10,865	2,013	3,213	7,677
Exports					
Slaves	persons	98	–	–	1,064
Kacang	*pikul*	361	–	–	–
Rice	*pikul*	502	–	–	–
Agar-agar	*pikul*	257	1,255	2,273	2,173
Trepang	*pikul*	570	3,135	1,398	1,068
Wax	*pikul*	74	85	66	203
Deer meat	*pikul*	62	–	–	–
Tin	*pikul*	99	–	–	–
Cloth, Buginese	pieces	2,130	3,733	3,247	2,160
Cloth, Sul. ot.	pieces	–	–	1,700	–

Semarang		1724-1726	1766-1769	1774-1777	1786-1789
Imports					
Oil, coconut	10 can	–	225	–	53
Rice	*pikul*	1,764	676	117	303
Tobacco, Jav.	*pikul*	2,289	411	880	2,031
Gambier	*pikul*	–	–	18	50
Tamarind	*pikul*	4	3	3	80
Salt	*pikul*	770	117	–	–
Exports					
Rixdollars	100 pieces	–	9	71	150
Slaves	persons	1	–	–	55
Wax	*pikul*	31	7	35	51
Coconut	100 pieces	53	–	–	–
Cloth, Buginese	pieces	110	17	47	–

Banjarmasin		1724-1726	1766-1769	1774-1777	1786-1789
Imports					
Rattan	bundles	425	–	166	–
Bowls	100 pieces	68	–	–	–
Plates	100 pieces	225	–	–	–
Pots, n. cop.	100 pieces	34	–	–	–
Exports					
Rice	*pikul*	312	–	123	–
Salt	*pikul*	61	–	6	–
Agar-agar	*pikul*	133	–	33	–
Cloth, Buginese	pieces	595	37	920	–
Cloth, Selay.	pieces	235	880	133	–

Pasir		1724-1726	1766-1769	1774-1777	1786-1789
Imports					
Rattan	bundles	1,648	–	–	–
Exports					
Rice	*pikul*	178	–	–	–
Salt	*pikul*	70	–	–	–
Cloth, Buginese	pieces	180	–	–	–
Cloth, Selay.	pieces	125	–	–	–

Kaili		1724-1726	1766-1769	1774-1777	1786-1789
Imports					
Oil, coconut	10 can	30	–	–	–
Coconut	100 pieces	851	–	76	–

Exports					
Paddy	*pikul*	542	–	–	–
Rice	*pikul*	–	82	188	–
Linen, Ch.	pieces	–	–	267	73

Sumbawa		1724-1726	1766-1769	1774-1777	1786-1789
Imports					
Slaves	persons	49	–	–	81
Oil, coconut	10 can	–	7	40	60
Kacang	*pikul*	–	–	–	120
Paddy	*pikul*	542	333	–	167
Rice	*pikul*	43	3,276	4,173	9,833
Buffalo meat	*pikul*	–	–	–	101
Salt	*pikul*	53	–	–	–
Agar-agar	*pikul*	–	5	286	327
Trepang	*pikul*	–	48	236	444
Cotton, raw	*pikul*	–	897	262	2,583
Exports					
Rixdollars	100 pieces	–	23	94	155
Salt	*pikul*	–	58	–	6
Iron	*pikul*	–	57	21	156
Silk, raw	*pikul*	–	31	39	47
Coconut	100 pieces	24	–	–	–
Bowls	100 pieces	–	80	208	151
Bowls and plates	100 pieces	–	35	95	176
Plates	100 pieces	–	55	66	82
Linen, Ch.	pieces	–	57	68	1,790
Cloth, Ch.	pieces	–	–	47	310
Cloth, Indian	pieces	25	556	447	753

Bima		1724-1726	1766-1769	1774-1777	1786-1789
Imports					
Oil, coconut	10 can	–	–	–	60
Kacang	*pikul*	70	–	13	25
Paddy	*pikul*	875	–	–	22
Rice	*pikul*	374	–	49	78
Agar-agar	*pikul*	–	–	420	117
Trepang	*pikul*	–	20	55	19
Cotton, raw	*pikul*	–	–	–	114
Exports					
Rixdollars	100 pieces	–	19	16	4
Bowls	100 pieces	7	24	102	8
Plates	100 pieces	4	22	91	2

Bugis		1724-1726	1766-1769	1774-1777	1786-1789
Imports					
Slaves	persons	–	–	–	159
Paddy	*pikul*	–	67	–	–
Rice	*pikul*	–	282	–	25
Agar-agar	*pikul*	–	–	197	231
Trepang	*pikul*	–	299	426	353
Exports					
Rixdollars	100 pieces	–	18	11	8
Tobacco, Ch.	*pikul*	–	31	64	100
Tobacco, Jav.	*pikul*	–	–	–	169
Cotton, raw	*pikul*	–	82	185	203
Bowls	100 pieces	–	2	30	20
Bowls and plates	100 pieces	–	18	49	48
Plates	100 pieces	–	38	29	9
Linen, Ch.	pieces	–	–	47	157
Cloth, Indian	pieces	25	7	70	258

Buton		1724-1726	1766-1769	1774-1777	1786-1789
Imports					
Slaves	persons	13	–	–	131
Rice	*pikul*	–	–	–	175
Trepang	*pikul*	3	540	877	1,052
Wax	*pikul*	3	16	36	92
Cotton, raw	*pikul*	–	7	–	93
Exports					
Rixdollars	100 pieces	–	8	28	53
Paddy	*pikul*	83	–	325	28
Rice	*pikul*	74	–	135	112
Tobacco, Jav.	*pikul*	–	–	13	64
Salt	*pikul*	201	12	–	–
Cotton, raw	*pikul*	–	23	53	3
Bowls	100 pieces	–	24	32	98
Bowls and plates	100 pieces	–	47	34	48
Plates	100 pieces	–	17	12	71
Bush-knives	100 pieces	–	6	5	37
Knives	100 pieces	–	34	8	59
Linen, Ch.	pieces	–	117	773	2,104
Cloth, Buginese	pieces	10	100	20	233
Cloth, Selay.	pieces	–	687	4,733	780
Cloth, Sul. ot.	pieces	–	–	160	413
Cloth, Indian	pieces	40	336	555	1,031

Bonerate		1724-1726	1766-1769	1774-1777	1786-1789
Imports					
Slaves	persons	–	–	–	63
Paddy	*pikul*	–	111	–	–
Trepang	*pikul*	–	871	279	326
Wax	*pikul*	–	10	77	26
Cotton, raw	*pikul*	–	107	17	111
Exports					
Rixdollars	100 pieces	–	29	10	41
Bowls and plates	100 pieces	–	–	15	33
Linen, Ch.	pieces	–	–	380	519
Cloth, Ch.	pieces	–	–	227	250
Cloth, Indian	pieces	–	377	124	623

Ende		1724-1726	1766-1769	1774-1777	1786-1789
Imports					
Slaves	persons	46	–	–	342
Oil, coconut	10 can	–	597	1,639	2,090
Exports					
Rixdollars	100 pieces	–	8	–	–
Bush-knives	100 pieces	10	11	11	40
Linen, Ch.	pieces	–	–	–	104
Cloth, Indian	pieces	163	121	85	122

Ambon		1724-1726	1766-1769	1774-1777	1786-1789
Imports					
Rixdollars	100 pieces	–	73	87	40
Exports					
Rice	*pikul*	10,915	1,070	751	135
Salt	*pikul*	726	–	–	47
Bowls and plates	100 pieces	–	10	13	97
Plates	100 pieces	1	–	7	33
Linen, Ch.	pieces	–	–	167	167
Cloth, Buginese	pieces	–	2,040	467	427
Cloth, Selay.	pieces	–	3,020	960	667
Cloth, Sul. ot.	pieces	–	1,523	767	367
Cloth, Indian	pieces	–	408	53	47

Banda		1724-1726	1766-1769	1774-1777	1786-1789
Imports					
Trepang	*pikul*	–	–	40	317
Exports					
Rice	*pikul*	6,352	204	–	57
Salt	*pikul*	263	58	–	128
Bowls and plates	100 pieces	–	–	13	123
Linen, Ch.	pieces	–	–	100	620
Cloth, Buginese	pieces	–	–	100	733
Cloth, Selay.	pieces	–	167	67	267

Source: Harbourmasters' registers
Comment: Boxes, n. cop., means boxes not made of copper, for instance wooden or plaited material. As it is not clear whether the *cepu*, flat betel boxes, in the administration were made of wood or metal, they are excluded here.
Buffalo meat also refers to *toppa* in so far as it is given in *pikul*.
Cups and jars refers to all sort of utensils for storing and consuming water, tea or rice. This is a sort of residual category.
Shellac applies to *gomlak* and *ambelau*, both of which are derived from beetles.

Table Y. Annual average imports and exports of selected commodities on the Amoy route and its percentage in the total private trade in Makassar in 1774-1777 and 1786-1789 (rounded-off)

		1774-1777		1786-1789	
		volume	%	volume	%
Imports					
Tobacco, Chinese	*pikul*	768	94	782	88
Tea	*pikul*	113	98	81	100
Silk, raw	*pikul*	33	94	89	100
Paper, sacrificial	bundles	533	100	–	
Gold thread	chests	24	100	32	94
Silk, woven	rolls	–		19	100
Bowls	pieces	2,667	100	33,180	98
Bowls and plates	pieces	35,667	88	26,667	99
Plates	pieces	18,333	96	47,733	99
Pans	pieces	3,833	79	15,235	97
Linen, Chinese	pieces	1,533	100	4,407	96
Cloth, Chinese	pieces	–		1,600	94
Blouses	pieces	–		1,767	100
Hats	pieces	1,200	100	–	
Umbrellas	pieces	2,167	100	2,833	85
Exports					
Buffalo meat	*pikul*	–		307	100
Agar-agar	*pikul*	567	20	500	19
Karet	*pikul*	–		30	63
Shark-fins	*pikul*	33	100	57	100
Trepang	*pikul*	3,167	69	6,000	85
Birds' nests	*pikul*	–		12	100
Wax	*pikul*	133	56	–	
Rattan	bundles	867	82	3,000	92

Source: Harbourmasters' registers
Comment: Buffalo meat also refers to *toppa*, in so far as it is given in *pikul*.

Table Z. Annual average imports and exports of selected commodities transported by the most important groups of private sector skippers, Amoy excluded (rounded-off)

1722-1726		Chinese		Burgher		Wajorese	
		Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
Slaves	persons	–	8	3	43	29	21
Arrack	10 can	355	–	450	5	–	–
Rattan	10 bundles	–	–	–	–	56	1
Kacang	*pikul*	–	49	–	196	–	39
Rice	*pikul*	368	7,129	1,629	9,077	6	515
Tobacco, Jav.	*pikul*	23	1	3	–	363	–
Tobacco, Ch.	*pikul*	195	–	33	–	68	–
Salt	*pikul*	89	70	1,017	919	–	88
Agar-agar	*pikul*	–	99	–	13	–	120
Trepang	*pikul*	33	210	–	102	–	151
Coconut	100 pieces	–	–	–	–	–	44
Flints	100 pieces	–	–	13	–	–	–
Bowls	100 pieces	5	1	–	3	57	–
Plates	100 pieces	90	3	3	1	117	–
Cups and jars	100 pieces	29	–	5	–	22	–
Pots, n. cop.	100 pieces	–	–	–	–	39	–
Tob. pipes	100 pieces	–	–	23	–	–	–
Boxes, n. cop.	100 pieces	8	–	3	–	11	–
Cloth, Bugin.	pieces	–	90	–	30	–	2,605
Cloth, Selay.	pieces	–	10	–	–	50	390
Cloth, Indian	pieces	705	15	925	10	7,723	90

1766-1769		Chinese		Burgher		Comp. Subj.	
		Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
Rixdollars	100 p.	40	38	33	3	–	14
Oil, coconut	10 can	248	–	237	–	157	70
Arrack	10 can	1,376	15	585	–	–	–
Beer and wine	10 can	–	–	41	–	–	–
Wine	10 can	–	–	66	–	–	–
Jenever	10 can	–	–	41	–	–	–
Paddy	*pikul*	–	–	–	–	350	50
Rice	*pikul*	2,307	392	1,486	433	1,532	57
Tobacco, Ch.	*pikul*	438	33	31	–	25	2
Salt	*pikul*	–	–	117	58	–	58
Agar-agar	*pikul*	–	817	–	–	10	33
Trepang	*pikul*	438	2,107	17	33	941	167
Cotton, raw	*pikul*	466	44	–	–	226	25
Bowls	100 pieces	20	66	–	–	–	39
Bowls and pl.	100 pieces	123	38	–	–	–	15
Plates	100 pieces	90	57	–	–	–	19
Cups and jars	100 pieces	–	17	–	–	–	–

Knives	100 pieces	24	2	1	–	1	8
Pans	100 pieces	12	4	1	–	3	2
Mirrors	100 pieces	45	5	–	–	1	–
Hats	100 pieces	10	1	1	–	–	–
Cloth, Bugin.	pieces	–	487	–	767	–	933
Cloth, Selay.	pieces	–	1,960	–	247	–	167
Cloth, Sul.ot.	pieces	–	1,293	–	83	–	27
Cloth, Indian	pieces	468	647	23	40	207	295

1774-1777		Chinese		Malay		Comp. Subj.	
		Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
Rixdollars	100 pieces	–	34	–	40	–	46
Oil, coconut	10 can	195	–	891	–	365	–
Arrack	10 can	602	4	–	–	–	–
Beer	10 can	43	–	–	–	–	–
Paddy	*pikul*	–	–	–	–	–	419
Rice	*pikul*	2,853	123	498	41	951	226
Agar-agar	*pikul*	96	1,537	543	250	157	60
Trepang	*pikul*	518	996	235	235	503	33
Iron	*pikul*	215	40	117	7	–	–
Cotton, raw	*pikul*	110	223	28	27	–	–
Coconut	100 pieces	–	–	12	–	70	–
Paving-stones	100 pieces	37	2	1	–	–	–
Bowls	100 pieces	–	284	–	40	–	44
Bowls and pl.	100 pieces	48	140	–	26	–	18
Plates	100 pieces	–	158	–	18	–	15
Bush-knives	100 pieces	1	18	3	7	7	7
Knives	100 pieces	37	1	4	4	–	4
Pans	100 pieces	9	5	–	–	–	2
Linen, Ch.	pieces	–	490	–	52	–	223
Cloth, Selay.	pieces	–	133	–	487	–	667
Cloth, Indian	pieces	513	424	100	240	30	297

1786-1789		Chinese		Malay		Comp. Subj.	
		Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
Rixdollars	100 pieces	30	41	10	94	–	63
Slaves	persons	147	203	389	65	137	–
Oil, coconut	10 can	87	50	1,990	10	400	–
Arrack	10 can	1,661	17	240	–	–	–
Anise	10 can	189	–	–	–	–	–
Kacang	*pikul*	–	–	129	–	–	–
Paddy	*pikul*	–	–	111	–	78	–
Rice	*pikul*	6,405	25	1,621	126	1,678	–
Tobacco, Jav.	*pikul*	529	35	463	43	48	81
Gambier	*pikul*	147	4	87	12	3	8

Buffalo meat	*pikul*	101	–	–	–	–	–
Salt	*pikul*	583	152	12	99	–	–
Agar-agar	*pikul*	67	1,270	308	550	333	–
Trepang	*pikul*	997	807	325	145	423	–
Wax	*pikul*	55	212	40	34	16	–
Iron	*pikul*	532	72	355	46	–	52
Cotton, raw	*pikul*	1,742	187	425	15	588	–
Bowls	100 pieces	3	201	–	14	33	36
Bowls and pl.	100 pieces	3	357	–	118	–	25
Plates	100 pieces	3	106	–	35	–	12
Bush-knives	100 pieces	20	10	41	65	–	24
Knives	100 pieces	31	17	44	49	–	27
Pans	100 pieces	–	23	–	4	–	3
Mirrors	100 pieces	4	–	22	3	–	–
Linen, Ch.	pieces	168	2,213	–	938	–	637
Cloth, Bugin.	pieces	–	1,060	–	460	–	33
Cloth, Selay.	pieces	–	827	–	33	–	33
Cloth, Indian	pieces	4,000	721	697	920	8	611

Source: Harbourmasters' registers

Comment: Boxes, n. cop., means boxes not made of copper, for instance wooden or plaited material. As it is not clear whether the *cepu*, flat betel boxes, in the administration were made of wood or metal. They are excluded here.

Buffalo meat also includes *toppa*, in case it is measured by the *pikul*.

Cups and jars refers to all sort of utensils for storing and consuming water, tea or rice. This is a sort of residual category.

Pots, n. cop., means pots and other containers made from earthenware.

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Index

Abrahamsz, Joost 159
Aceh 18-9, 21-2
Adatis 226
agar-agar (seaweed) 36, 98-9, 101, 120-1, 138-9, 147-8, 152-4, 158, 160, 162, 164, 169, 208-13, 215-22, 224-5, 227, 230, 240-3, 246-9
Alexandersz, Pieter 157
Amanna Gappa 55-6, 63, 66, 159
Amanna Radja 159
Ambon 5, 10, 19, 21, 26, 64, 67, 70, 72-3, 87, 89-90, 98, 106, 112-3, 120, 128-9, 132, 137, 144, 149, 152, 157-8, 168, 197, 201, 236, 238, 244
Ambonese 18
America 171
American 172
Amoy 10, 33, 70, 73, 77-8, 88, 95-6, 99, 102-5, 107, 110, 120-1, 123, 132-3, 136-40, 145, 147-9, 152-3, 156, 165-6, 168-9, 171-2, 196, 230-2, 234-9, 246-7
Amphioen Sociëteit 231
Amsterdam 4
Anglo-Dutch War, Fourth 34, 38, 52, 60, 68, 79, 168
Anise 240, 248
April (name) 63
Archipelago, Malay-Indonesian 3-4, 14-5, 17, 21, 45, 58, 98, 113, 145, 169, 171-2
Armosins 226
Arrack 84, 92-4, 120, 124, 138-9, 149, 152-4, 157, 162, 169, 178, 208-13, 215-22, 224-7, 230, 240, 247-8
Aru Cajoe 160
Arung Palakka 4, 13-5, 22
Arung Singkang 14, 28, 39, 67, 93, 141, 150
Asia 1, 4, 13, 23, 26, 38, 42, 52, 66, 84, 87, 92, 138, 171, 173, 196
Asian 11, 17, 42, 58-9, 62, 170
Asia, Southeast 5, 21, 46, 51, 53-5, 99, 170, 172
Asian, Southeast 1, 4-5, 18, 47, 57-9, 172-3
Asschat (ship) 37
Atlantic Ocean 1, 120
Australia 3, 74, 99

Bacon 41
Baftas 39, 115-6, 177
Bajau *see* Turijene
Bakker, Jacob Bickes 36, 53, 63, 66-7, 87, 117, 123
Bakker, Jacob Philippus 66
Bali 19, 29-30, 113, 226
Balinese 29, 71
bamboo 19
bananas 27
Banda 5, 19, 21, 26, 64, 67, 70, 72-3, 90, 98, 102, 106, 113, 120, 128-9, 132, 137, 144, 149, 158, 168, 197, 201, 236, 238, 245
Bandanese 18
Banda Sea 3, 143, 171
Banggai 19
Bangka 112
Banjarmasin 14, 18-9, 21, 27-8, 73, 90, 95, 98, 102, 104, 106, 112, 130, 132-3, 137, 140-1, 150, 161, 197, 201, 236, 238, 241
Bantaeng 14, 31, 109, 117

Banten 1, 3
Bappa Bimbie 162, 164
bark *see* brigantijn
Barru 101
Batara Gowa Amas Madina 15
Batavia 1, 3-4, 9-10, 13, 15, 18, 21-3, 25-30, 33-4, 36-8, 40-3, 46, 50-2, 54, 57, 63-4, 66-7, 69-74, 76-7, 83, 87-8, 90, 92-6, 98-9, 101-3, 106-8, 112-20, 124, 126, 128-33, 135-9, 145, 147-50, 153-4, 157-63, 165-9, 171, 197, 201, 229-31, 234, 236-40
beer 92-3, 152, 240, 247-8
Behiapko 56
Belitung 226
Beliung *see* bush-knives
Bellevliet (ship) 37
Bengal 40-1, 111, 114-5
Berau 21
betel-boxes 157
betilles 40
Bima 15, 19-22, 25-6, 36-8, 66, 69-74, 76, 89-90, 99, 105-6, 120, 127-9, 133, 136, 142-3, 157, 168, 197, 201, 236-8, 242
Bimanese 58
Bira 24-5, 50, 226, 228, 232-3
birds' nests 28, 102-3, 124, 144, 148, 208-13, 215-22, 224-5, 227, 230, 246
blouses 111, 226, 246
blunderbusses 53-5, 190-1
Bone 4, 11, 13-5, 17, 20, 22, 24-7, 29, 31-2, 34-5, 42, 57-8, 87, 89, 111, 145, 150, 226
Bone, Gulf of 40
Bonerate 25, 31, 72-5, 77-8, 101, 108, 116, 120, 128-9, 131, 136, 143, 152, 163-4, 166, 169, 197, 201, 236-9, 244
bowls and plates 103-6, 120, 124, 138, 140-1, 143-4, 146-50, 159-60, 163-5, 169, 175, 177-8, 208-26, 228, 232, 234, 240-9
boxes 240, 245, 247, 249
boxes, copper 106
boxes, lacquered 159
brandy 226
Braudel, F. 1, 5
Brée, D. 6
brigantijn 49, 188
bronze 53
Bruyn Kops, G.F. de 48
Buginese 4, 11, 13-4, 17-8, 22, 24, 26-8, 32, 35-6, 42, 53, 58-9, 62, 65, 78, 91, 95, 111, 113, 115, 119, 133, 150, 156, 159-61, 192, 194
Bugis 13-5, 25, 32, 36, 72-3, 96, 99, 101, 103, 105-6, 117, 119, 142, 162-4, 169, 197, 201, 236-9, 243
Bugis Market 22, 24, 27, 32
Bulukumba 50
Bungaya, Treaty of 13, 15, 20, 26-7, 167
Burggraaf, Simon 117, 129
Burgher 10, 18, 21, 23, 26, 30-1, 40, 42, 57-66, 68, 76, 78, 89-90, 93-4, 98, 101, 114, 116-9, 121, 129, 133-7, 145, 149, 151-4, 156-62, 165-6, 168-9, 173, 192, 194, 238, 247
bush-knives 84, 107-8, 124, 139, 163-4, 175-6, 208-10, 212-9, 221-6, 228, 232, 234, 240, 243-4, 248-9
Buton 11, 19, 22, 25, 31, 69, 72, 75, 96, 98, 101, 103, 105-6, 108, 110-3, 116, 118-20, 131, 137, 142-3, 162-4, 166, 169, 197, 201, 226, 236-9, 243
Butonese 17-8, 32, 58
butter 41

Calcutta 171
Cambayas 226
Cambodia 18-9, 21
cannekins 226
cannon 53-5, 190-1
Canton 109, 171, 234-5
Carper, Thomas 65, 157
cassas 40, 114-5, 177, 226, 233
Cebu 18-9
Cenrana 20, 22, 57, 142, 197, 201
ceramics *see* earthenware
Ceylon 15
chavonis 39
chelas 226
chests, Butonese 106, 123, 208-10, 212-9, 221-5, 228, 232
chialoup 20, 25, 45-7, 49-54, 60, 62-6, 69, 71-2, 78, 117, 157-8, 165, 168-9, 186-90
China 3, 10, 20, 27-9, 31, 33, 61, 68, 72-3, 75, 78, 87, 94, 96, 98-9, 101-2, 104-5, 108-10, 121, 125-6, 138-41, 145, 149, 152, 165, 169, 171, 173, 200, 204, 226, 230
Chinese 5, 10, 16-8, 21, 23, 25-36, 42-3,

45, 49, 57-62, 65-6, 70, 72, 76-8, 88-90, 93-6, 98-9, 101-5, 107-10, 113-6, 119, 121, 123, 133-7, 141, 143-4, 149-50, 152-6, 158-9, 161-6, 168-9, 171-3, 192, 194, 238-9, 247-8
Chinese Peranakan 17, 57-9, 96, 101, 103, 108, 110, 112-3, 115, 133, 152, 155-6, 166, 192, 194
chintzes 39, 41, 110, 114-6, 160, 162, 177, 226, 228-9, 233
chuan 49, 72
cindais 226
Cirebon 94, 98, 226
cloth 21, 84, 108, 141-3, 150, 153, 162, 176-7, 207, 226
cloth, Buginese 38-9, 111-3, 124, 138-9, 140, 144, 150, 159-61, 208-10, 212-9, 221-6, 228-9, 232-3, 240-1, 243-5, 247-9
cloth, Chinese 110-1, 147, 164, 177, 208-10, 212-8, 220-6, 228, 233, 242, 244, 246
cloth, Indian 4, 9-10, 20-3, 27, 29, 34, 38-42, 69, 110-6, 120, 124-6, 138-9, 141-3, 148, 150, 153, 155, 157, 159-60, 162-5, 167-9, 177, 208-9, 211-8, 220-6, 228-9, 233, 240, 242-4, 247-9
cloth, Indonesian (non-Sulawesian) 10, 113-4, 154, 208-9, 211-8, 220-6, 229, 233
cloth, other Sulawesian 10, 29, 111-2, 124, 126, 139-40, 144, 152-3, 155, 208-9, 211-8, 220-6, 229, 233, 240, 243-4, 248
cloth, Selayar's 39, 111-3, 144, 152, 208-9, 211-8, 220-6, 229, 233, 241, 243-5, 247-9
cloves 3, 19
coconut 10, 27, 91, 120, 124, 141, 150, 161, 207-13, 215-22, 224-5, 227, 230, 241-2, 247-8
coffee 93, 170
Colombo 229
committers 226
Company's Subject 57-9, 61, 76-8, 88-91, 96, 99, 101, 108-10, 116, 119, 133, 136-7, 149, 152, 155-6, 162, 164-5, 192, 194, 238-9, 247-8
copper 87, 106, 178
Coromandel 39-41, 111, 115
cotton 36, 39, 40-1, 108-10, 114-6, 120, 141-2, 152-3, 155, 163, 169, 175, 177-8, 208, 210-16, 218-25, 229, 234, 242-4, 247-9
country-traders 27-9, 40, 55, 114, 167, 171
cups and jars 240, 245, 247, 249
cups and saucers 84, 138, 226
customs 9, 19-20, 24-5, 30, 32, 34-6, 43, 68, 116, 126, 145, 167

Daeng Maladja 65
damask 110, 226
Danes 11
diamonds 28
drugs 10, 94
duit 38, 87
dukaton 87
Dutch 1, 3-6, 9, 11-7, 19-21, 23, 28-9, 42, 47-8, 51, 53, 55
Dutch Republic 9
dye-stuff 108, 164

earthenware 10, 27, 84, 103-5, 114, 138-42, 144, 148-9, 152-3, 155, 157-9, 161, 164, 249
East Indiaman *see* spiegelschip
Eerdmans, A.J.A.F. 19, 22, 30, 32-3
Ende 21, 24-5, 91-2, 108, 119-20, 143, 154-5, 165, 197, 201, 231, 236-7, 239, 244
Endenese 17, 58
England, English 11, 15, 20, 27-9, 40, 55, 67, 82, 113-4, 167, 171-2
Enkhuizen 66
Europe, European 1-5, 17, 20, 34, 42, 45-6, 49, 51-4, 57-9, 84, 87, 92, 121, 152, 154, 157, 170-3, 196

Fernando, R. 172
flints 247
Flores 21, 91, 119, 143, 167
Flores Sea 3, 26, 42, 58, 69, 71-4, 82, 87, 89, 143, 152, 154-5, 160, 168-9, 171
Forrest, Thomas 48, 51, 53
Fransz, Pieter 158
French 157

Galesong 14, 57-8
Galesonger 17, 42, 58-9, 69, 78, 89, 133, 155-6, 192, 194
gambier 96, 164, 165, 176, 178, 208-13,

215-22, 224-5, 227, 231, 240-1, 248
gerasses 114-5, 158-60, 226, 228-9
gingams 110-1, 177, 226
glass ware 176
Goa 11
gobars 226
gold thread 36, 84, 108-9, 146, 163, 175-6, 178, 209-16, 218-25, 229, 234, 246
gongs, copper 106
gonting 20, 45-7, 49-51, 53-4, 60, 64-5, 159-60, 186-8, 190
Gowa 3, 11, 13-8, 22, 24, 27, 30, 57-8, 65, 87
Gresik 29, 197, 201, 230-1
Guinees 40, 41, 115, 177, 226
Gujerati 16
gulden 66
gunpowder 28, 53-4, 190-1

Hammans 177, 226
Hardenberg the elder, Cornelis 158
hats 27, 246, 248
Hodenpijl (family) 66
Hodenpijl, Willem Philippus 119
Hoeasaning 56
Hoop, De (ship) 66-7
Hoorn (ship) 37
Horridge, A. 47
Huis te Bijweg (ship) 37

Ikhin (ship) 146
India, Indian 3, 18, 38, 55, 57-8, 94, 113, 167
Indian Ocean 1, 11
Indonesia, Indonesian 1, 4-5, 15-6, 113, 170-1
Intje Abdul Kadir 33
Intje Abdul Rachman Datuk Sabutung 33
Intje Bora 162, 164
Intje Sadolla (Ali Asdullah) 33-6
Intje Samba 162, 164
Intje Tiekoe 67
iron 10, 41, 51, 53, 106-7, 120, 139, 157, 162-3, 209-16, 218-26, 229, 234, 240, 242, 248-9

Jakarta 47
Jambi 19, 21, 29
Jansz, widow 118
Jansz, Barend 36, 63, 66-7, 117, 129
Jansz, Maria 158
jars 138, 149-50
Java, Javanese 1, 4, 7-8, 19-21, 29, 45-6, 49-54, 58, 61-2, 64, 68, 71-5, 83, 87, 89-90, 92, 94-6, 102, 113, 139-41, 149, 152, 158, 168, 171-2, 200, 204, 226, 230, 232-5
Java Sea 3, 74, 167, 171
jenever 152, 240, 247
Johor 19, 21-2, 29, 38, 160
jonk, see junk
junk 19, 25, 27-8, 31, 33, 49, 72-3, 75, 77, 88, 95-6, 99, 101-5, 120, 133, 136, 138-9, 145-7, 149, 152-3, 156, 165, 188, 196, 230-2, 234-5

kacang (beans) 157, 159, 175, 177, 240, 242, 247-8
Kaili 24, 26-7, 31, 73, 89, 91, 117, 120, 127, 129, 141, 198, 202, 236, 241
Kalimantan 11, 14, 18, 20-1, 28, 51, 53, 73-4, 102, 104, 141, 171, 200, 204
kamkanis 226
Kampung Baru 17, 57-8
Kampung Bugis 17, 58
Kampung Galesong 17, 57-8
Kampung Melayu 17, 57-8
Kampung Wajo 17, 55, 57-8, 150
Karaeng Bontolangkas 67, 93
Karangasem 29
karet (tortoise-shell) 40, 98-9, 124, 162, 209-16, 218-25, 229, 234, 246
karikams 115, 177, 226
Kasimbasar 233
Kedah 29
keizersdaalder 87
kepeng *see* pici
kettles, copper 27, 106
Kiefhoek (ship) 37
Knaap, G. 1
knives 107-8, 124, 139, 176-8, 208-9, 211-7, 219-26, 229, 234, 240, 243, 248-9
Kodjas *see* Moors
Komodo 25, 198, 202
Konjo 51
Kouwtoko 161, 163-4

Kraak, Pieter 26
kuali *see* pans
Kutei 14, 18, 21, 27, 141

Laarhoven, R. 41
Latanie 159-60
lead 87, 106, 240
Lemo-lemo 51
Leur, J.C. van 1, 170-1
Lijanko 30, 66
Limnauko 158
linen, Chinese 110, 112, 120, 126, 142-4, 147-8, 153, 155, 163-4, 176-8, 208-9, 211-7, 219-26, 229, 234, 242-6, 248-9
Lisianko 36
Lisinko 31
Litaylo 36
Lombok 29, 71, 226
Luwu 25, 228
lijnwaden *see* Guinees

Mabela 160-1
Macao 18-9, 21, 62, 226
mace 19
Madura 226
Makassar Straits 3, 26-7, 42, 73, 75, 102, 112, 150, 152, 160-1, 167
Makassarese 14-5, 18, 20-1, 24-7, 29, 42, 58-9, 62, 65, 76, 89, 91, 95, 150, 160-1, 192, 194
Malay 4, 10-1, 16-8, 21, 23, 27, 33, 42-3, 45, 57-61, 64-5, 76-8, 89-90, 92, 95, 99, 101, 106-8, 110, 113, 116, 119, 133, 136-7, 143, 149, 154-6, 162, 164-6, 168-9, 192, 194, 239, 248
Malay Peninsula (Malaya) 3, 29, 96, 200
Malayan Waters 20, 29, 200, 204
Maluku 3-4, 11-3, 19-21, 26, 28, 37, 42, 50, 61, 69-70, 72-3, 75, 78, 87, 89, 98, 106, 112-3, 128, 133-4, 137-8, 140, 144, 149, 152, 154, 157-8, 165, 168-9, 171, 200, 204
Mamantoele 56
Mandar 14, 20, 22, 24, 26-7, 31, 40, 49, 111, 117, 226
Mandarese 27-9, 48, 58, 192, 194
Manggarai 24, 117, 198, 202
Manila 12, 18-9, 21, 29
Mardijker 26, 62, 65, 159-60
Maro 162, 164
Maros 14, 57
Marosser 58, 192, 194
Martinie, widow 118
Mataram 1
mats 27, 164
meat, buffalo 147, 242, 245-6, 249
meat, deer 157, 240
meat, dry 163
Meeuwtje (ship) 37
Melaka 3, 11, 19, 29
Melaka Straits 4, 11, 20-1, 27, 29, 38, 45, 172, 200
Mestizo 17-18, 23, 42, 57, 59
Michielsz, Anthonij 157
Middle East 3
Mindanao 18-9, 21
mirrors 177, 240, 247, 249
Moluccan 17
Moluccas *see* Maluku
mondkost *see* victuals
money 10, 21, 27, 38, 84, 86-9, 118, 165, 207-14, 216-23, 225, 227, 230
Moor 18, 42, 58-9, 62, 65, 159-60
Moor Peranakan 58-9, 193, 195
muris 40, 177, 226

Nagtegaal, L. 1
Nanking 109-10
Nanyang 152-3, 156
Netherlanders *see* Dutch
Netherlands 9, 18, 23, 41, 118, 120
New Guinea 3
Njampa 160-1
Noorduyn, J. 1
Nooteboom, C. 47-8
Northern Districts 14, 41-2, 57-8
November (name) 63
Nusa Tenggara 3, 11, 19-21, 50, 61, 69, 72-5, 77, 83, 143, 165, 168, 200, 204
nutmeg 3, 19

Oeynjeko 35-6
oil, coconut 84, 91-2, 120, 124, 143, 154, 165, 169, 178, 208-13, 215-22, 224-5, 227, 231, 240-2, 244, 247-8
Ongkauko 161, 163

Ongkongiem 147
opium 28-9, 94-5, 124, 139, 164, 176-8, 208-12, 214-21, 223-5, 227, 231
Outer Islands 1, 3
Ouwerkerk (ship) 146

paddy 89-90, 120, 124, 141-2, 150, 175, 208-12, 214-21, 223-5, 227, 231, 242-4, 247-8
Paduwakang 25, 45, 47-51, 53-5, 61, 69, 71, 78, 119, 161-2, 168-9, 173, 186-8, 190-1
Palembang 19, 21, 29, 64
palm-wine 92-3
Pankor 45, 48-51, 60, 78, 160, 168-9, 186-8
pans 107, 147-8, 158, 161, 163, 177-8, 208, 210-17, 219-26, 229, 234, 246, 248-9
paper 84, 146, 175, 178, 246
parang *see* bush-knives
parcalles 39-40
Pare-Pare 24
Paris, Peace of 55
Pasir 14, 18, 21-2, 27-8, 31, 73, 98, 102, 112, 120, 141, 150, 161, 198, 202, 230, 236, 241
patolus 226
paving-stones 240, 248
Pegatan 51
pelari *see* pinisi
Pelras, C. 56
pencalang 27, 45-7, 49-54, 64, 69, 157, 159, 186-7, 189-90
pepper 27-8, 170
Petjongseng 36
Philippines 3, 12, 20-1
picis 87-8, 120, 140-1, 147, 175, 177, 208-14, 216-23, 225, 227, 230
pieces (guns) 53, 55, 190-1
Pietersz, Evert 22-3
pigs 163
pinisi 47
piring *see* bowls and plates
planks 157
plates *see* bowls and plates
Poea Basse 162, 164-5
Poea Saida 162, 165
Pollux (ship) 37
Polombankeng 14
porcelain 103
Portuguese 11-2, 16, 18, 20-1, 62
pots 241, 247, 249
pots, copper 106, 150
Prins, François 22-3
Pulau Laut 27, 73, 102, 161, 198, 202

Queleko 146
Quepilong 30
Quepodang 145
Quepoko 146
Quepolong 147

Raadman, Andries 65
Raben, R. 1
radix china 177
rattan 73, 102-3, 120-1, 124, 141, 147-8, 150, 161, 169, 209-15, 217-24, 226, 230, 234, 241, 246-7
reaal 66, 87, 146
Reid, A. 4-5, 170, 172
Rembang 45
Remmelink, W. 1
Rentaka 53-5, 190-1
resins 102, 164
Riau 29
rice 27, 36, 41-2, 81, 89-90, 92, 103, 120-1, 124-5, 137-42, 144, 149-50, 152-5, 157-9, 161, 163-5, 168-9, 175, 177, 179, 208-12, 214-21, 223-5, 227, 231, 240-5, 247-9
Ricklefs, M.C. 1
rixdollars 66, 87-9, 120, 124-5, 137, 140-4, 154-5, 158, 164-5, 169, 208-14, 216-23, 225, 227, 230, 241-4, 247-8
rope 161, 175
ropij 87
Rosenquist, Axel Anthonij 119
Rosenquist, Coert Axelsz 30
rosewater 176
Rotterdam, Fort 16-8, 22, 26-7, 30-1, 39, 42, 57-8, 66, 93, 167
Rotterdam (ship) 37
Routier, widow 118
rumals 41, 226
rijksdaalder *see* rixdollar

salempores 39, 114, 116, 177, 226
salt 10, 28, 96, 98, 120, 124, 140, 144, 149, 153, 157, 161, 165, 177, 208-12, 214-21, 223-5, 227, 231, 240-5, 247, 249
Samasoen (ship) 146
sanas 226
Sanggar 198, 202
Sangkilang alias Batara Gowa 15, 34, 67, 110, 113
Sanrabone 30, 65
sappanwood 38, 69, 74, 76
sarasses 226
satin 110, 226, 229, 234
saucers *see* cups and saucers
Sawito 27
schelling 24, 87
Second World War 1
Segeri 27
Selangor 29
Selayar 14, 25, 66, 111-3, 140, 143, 198, 202, 226
Semarang 10, 25, 27, 29, 50, 62, 70, 77, 83, 87, 89-91, 95, 98, 103, 106, 120, 127-8, 130, 137, 139-41, 149-150, 157-8, 160-1, 165, 168-9, 202, 231-2, 236-8, 241
Seram 19
shark-fins 246
shellac 102, 162, 240, 245
Siak 29
Siam 19, 21
Siang 27
Sidenreng 11
Sidenreng, Lake 20
silk 27, 36, 124
silk, raw 108-9, 126, 141, 146, 148, 163, 175-8, 209-15, 217-24, 226, 230, 235, 242, 246
silk, woven 39, 41, 84, 110, 115, 208, 210-7, 219-26, 229, 234, 246
Singapore 3, 47
Singkang 226
Siso, Jan de 118-9
slaves 10, 18, 20, 22, 26, 28, 41, 55, 63, 66, 84, 116-20, 124-6, 129, 136-9, 142-3, 149, 152-5, 157, 159-60, 162-6, 169, 171, 207, 209-15, 217-24, 226, 230, 235, 240-4, 247-8
snaphaunces 53-5, 190-1
Soeyamko 161-2
sologesies 114-5, 160, 226
Solor 24, 26, 198
Soppeng 11, 14
Soreang 27
South China Sea 1, 3, 75, 171
Southern Districts 14, 41-2, 57-8
Spanish 11-2, 21, 172
Speelman, Cornelis 13, 17-9, 21, 29
Spermonde Archipelago 20
spices 3-4, 12-3, 19-20, 28, 42, 69, 167
Spice Islands 11
spiegelschip 37-8, 52, 68-9, 76, 168
Sri Lanka, see Ceylon
Sriwijaya 3
Stapel, F.W. 170
Stavorinus, Johan Splinter 51, 146
stuiver 24-5, 87
sugar, candy 92, 208-12, 214-21, 223-5, 227, 231, 240
sugar, cane 10, 92, 157, 170, 207
sugar, fine-grain 92, 176, 178, 208-12, 214-21, 223-7, 231, 240
sugar, palm 84, 91, 124, 157, 178, 208-11, 213-20, 222-7, 231
Sukadana 18-9
Sulawesi 3-4, 9, 11, 21, 24-5, 30, 38, 40, 45-7, 51, 57, 67, 73, 75, 78, 83, 89, 98, 103, 111-2, 114, 119, 139, 141, 143, 167-8, 200, 204, 226, 235
Sulawesi, South 1, 3, 8-9, 13-5, 20, 23, 30, 42-3, 47-8, 50-1, 53, 58, 74, 89, 108-10, 167
Sulawesian 4, 9-10, 17, 21, 24, 26-7, 29, 34-5, 49-53, 55, 57-61, 63, 65, 70, 78, 91, 94-5, 98, 101-2, 104, 111-2, 115-6, 119, 121, 133, 141, 143, 149-52, 155-56, 160-1, 166, 168-9, 173
Sulu 18-9, 21, 28-9, 55, 141, 171-2
Sulu Sea 171
Sumatra 3, 29, 96, 200
Sumba 24, 113, 119, 142, 198, 202, 226
Sumbawa 10-1, 19, 21-2, 24-5, 30, 36, 40, 69, 70-3, 76-8, 88-90, 99, 101, 105-6, 109-10, 116-20, 127, 129, 131, 133, 136, 138, 141-3, 152, 161-6, 169, 199, 203, 236-9, 242
Surabaya 29, 47, 91, 98, 154, 163, 199, 203

Surat 39, 115, 177, 229, 233
swivel guns 53-5, 190-1

Talens, J. 1
Talo 3, 11, 13, 18, 24, 27, 30, 33, 58, 65
tamarind 241
Tambora 25, 199, 203
Tambuko 19
Tanakeke 20
Tanhoetko 145
Tanmasing 161-2
Tantjanking 162-3
tapis 226
tea 96, 103, 147-8, 158, 176, 178, 208-11, 213-20, 222-5, 228, 231, 240, 246, 249
Tempe, Lake 20
Ternatan 58
Ternate 11-2, 22, 70, 98, 106, 113, 199, 203
textile *see* cloth
Thesoenko 31, 33
Thesoeko 146
timber 19
Timor 19, 21, 24, 26, 69
tin 106, 240
Tjoakonseeng 161, 163-4
To Alie 160
Toakaytsjeu (ship) 145
Toasie 159-60
tobacco, Chinese 94-6, 124-6, 138-9, 145-9, 152-3, 157-8, 163-5, 176-7, 208-11, 213-20, 222-5, 228, 231, 240, 243, 246-7
tobacco, Javanese 94-6, 120, 124-5, 137, 140, 150, 153, 161-2, 164-5, 168-9, 176-7, 208-11, 213-20, 222-6, 228, 232, 240-1, 243, 247-8
tobacco pipes 157, 240, 247
Tobias 63
Todalima 160
Todawang 159
Toesie 159-60
Tohoema 159-60
Toiga 159
Tonio 160-1
Tosaleng 160-1
Tosawa 160
Toserang 160-1
Tottie 159-61
trepang 24-5, 28, 36, 40, 78, 98-9, 101-2, 120-1, 124-6, 138-9, 142-4, 146-9, 152-3, 155, 158, 160, 162-6, 169, 173, 178, 208-11, 213-20, 222-5, 228, 232, 234, 240, 242-9
Trocki, C. 172
Tsjakeenko 158
Turijene 21, 27, 40, 98

Ujung Pandang 17
umbrellas 146-7, 246
Utrecht 22

Valentijn, François 52-3
victuals 82-3, 206-7, 237
Vlaardingen 16-7, 25, 46, 57-8, 93, 230
VOC, cruising expedition 25, 27, 37, 40, 42, 69-70, 76
VOC, Directors 9, 118, 120
VOC, employees 17-8, 23, 36, 41-2, 59, 66, 93, 118, 171
VOC, harbourmasters 3, 5-6, 8, 22-6, 29-30, 32, 36, 42-3, 47-9, 52, 55-6, 58-9, 64-6, 70, 88, 101, 107, 116-7, 129, 137, 139, 146, 152, 159, 167-9, 173, 196
VOC, High Government 9, 23, 27, 29-30, 33, 35, 37, 39, 42-3, 46, 51, 93, 116, 118, 145, 167
VOC, local Makassar government 4-5, 8-9, 14-7, 21-3, 27, 29-30, 33-4, 39, 42-3, 46, 66, 118, 128, 145, 167
VOC, shipping 8, 10, 37, 52, 56, 62, 67-70, 76, 79, 82, 168, 172, 183, 185, 196
VOC, tax farms 9, 30-6, 43, 68, 92-3, 117, 145, 157, 168
Voll, Adriaan 116
Voll, Jan Hendrik 40
Voort, Paulus Godefridus van der 146
Vos, R. 3
Vrijburg (ship) 37
Vuuren, V. van 47, 49-50

Wajo 11, 13-5, 20, 27, 31, 111, 137, 141, 226
Wajorese 4, 17, 22, 24, 27-9, 39, 42, 55, 57-60, 64-65, 73, 76, 90-1, 95, 98, 101-2, 104, 106, 112-4, 133-7, 149-52, 154, 156, 159-61, 165, 169, 173, 193, 195, 238, 247
Wangkang 27, 29, 49, 72

Warren, J.F. 171
Wassenaar (ship) 37
wax 28, 102-3, 147-8, 157, 161-2, 164, 209-15, 217-24, 226, 230, 235, 240-1, 243-4, 246, 249
weapons 28, 52-5, 190-1
wine 92-3, 152, 157, 240, 247

Xiamen *see* Amoy

Zandijk, Hendrik 157

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Monsoon Traders

Makassar was one of those early-modern Southeast Asia kingdoms which has been seen as exemplifying 'The Age of Commerce', both in its trade-based prosperity in the late sixteenth and early seventeenth century, and its decline into insignificance following conquest by the Dutch East Indies Company in 1667.

However, statistical analysis of the Dutch harbourmasters' registers (which listed incoming and outgoing non-Company traffic) reveals that Makassar actually succeeded in establishing new and profitable networks after a difficult period of transition. Initially the Company confined the port's private sector overseas trade and shipping within narrow limits, but by the middle of the eighteenth century new routes and traders had emerged. Whereas slaves and rice had once been predominant exports, focused upon the colonial centres of Batavia and Maluku, by the mid-1700s sea produce, in particular sea cucumbers, had become the most important commodity. This marine product was in great demand in China, and the consequent dramatic shift in Makassar's commercial profile was reflected in new patterns of exchange, within which Chinese merchants and skippers gradually surpassed all other ethnicities in importance. This volume provides detailed material on shipping, crews, armament, routes, merchandise and skippers, and hence offers unique insights into both the trade of Makassar itself, and the wider transformations of Asian commerce in the eighteenth century.

Heather Sutherland (1943) is an historian who was trained at the Australian National University and Yale. At present she is professor of Non-Western History at the Vrije Universiteit in Amsterdam. Gerrit Knaap (1954) graduated as an historian from Utrecht University. He is the head of the Archives & Images Department of the KITLV.

KITLV
Koninklijk Instituut voor Taal-, Land- en Volkenkunde
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